The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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Stannaries of Cornwall—In the Vice-Warden's Court.

HODGE *v.* KIRKMAN.

WHEREAS the VICE-WARDEN did, by an ORDER, or DECREE, made in the above-mentioned cause, and bearing date the 6th day of December last, Order and Decree that a SALE be made of the ORES and HALVANS, (and if necessary) the ENGINES, MACHINERY, and MATERIALS, upon and belonging to ALVIGGAN MINE, in the parishes of ST. STEPHENS, in Branwell, and ST. MEWAN, within the said Stannaries, under the direction of the Registrar of the Court; and that the proceeds of such sale should be applied by the said Registrar in the manner directed by the same Order or Decree.

Notice is hereby given, that, pursuant to the said Order or Decree, a PUBLIC AUCTION will be HOLDEN at ALVIGGAN MINE aforesaid, on Wednesday, the 19th day of January inst., and following day, at Eleven o'clock in the forenoon of each day, for SELLING, either together or in lots, the under-mentioned

MINING MACHINERY AND MATERIALS—viz.: 1

ONE STEAM-ENGINE, 36-inch cylinder (8 feet stroke in the shaft); one boiler, about 9 tons, with 4 fathoms of iron rod.

ONE 10½-inch cylinder STEAM STAMPING ENGINE, with 24-heads of stamps, boiler, and two axles and frames.

WATER-WHEEL, 11 feet diameter and 16 inches abreast, with iron axle.

Shears, 6 and 5½-inch whim-ropes, ¾-inch and ⅝-inch chain, about 50 fathoms of 10, 9, and 4-inch pumps, with doorpieces, windbores, washing barrels, 2 horse-whims, several fathoms of flat and connection-rods, launders, ladders, 2 Brenton's patent frames, with separators, iron winch, 3 iron pulley blocks, iron kibbles, weighing machine, man-engine, racks, buddles, kieves, wheel and hand-barrows, launders and trunks, racking tools, 1 36-inch smith's bellows, 2 anvils, vice, smith's crane, screwing stock, taps and plates, smiths' and miners' tools, grinding stone, several tons of new and old wrought and cast-iron, a quantity of useful new and old timber, carpenter's bench, several wood erections, dial and stand, brass measuring chain, a small quantity of tin and tinstuff, tin sacks, and other useful materials, with the ACCOUNT-HOUSE FURNITURE.

For viewing the same, application may be made to Mr. M. Teague, on the mine; and for further particulars (if by letter, pre-paid) to Mr. H. S. Stokes, solicitor, Truro.

Dated Registrar's Office, Truro, the 5th day of January, 1848.

Stannaries of Cornwall—In the Vice-Warden's Court.

PURSUANT to a DECREE of the VICE-WARDEN'S COURT, made in the cause of HODGE *v.* KIRKMAN, the CREDITORS, in respect of ALVIGGAN MINE, in the parishes of St. Stephens, in Branwell, and St. Mewan, within the said Stannaries, are, on or before the 20th day of January inst., to come in and PROVE their DEBTS before the Registrar of the said Court, at his office, in Truro; or, in default thereof, they will be peremptorily excluded the benefit of the said Decree. 2

Dated Registrar's Office, Truro, Jan. 6, 1848.

Stannaries of Cornwall—In the Vice-Warden's Court.

HILL *v.* VIGURS,

IN THE MATTER OF THE ROYAL POLBEROU MINES, OTHERWISE THE ST. AGNES CONSOLIDATED MINES.

WHEREAS the VICE-WARDEN did, by an ORDER, or DECREE, made in the above-mentioned cause, and bearing date on the 26th day of August, 1846, Order and Decree that a SALE be made of the ORES and HALVANS, and (if necessary) the ENGINES, MACHINERY, MATERIALS, and EFFECTS upon and belonging to the ROYAL POLBEROU MINES, otherwise the ST. AGNES CONSOLIDATED MINES, in the parish of ST. AGNES, within the said Stannaries, under the direction of the Registrar of the Court, and that the proceeds of such sale should be applied by the said Registrar in the manner directed by the said Order or Decree.

Notice is hereby given, that, pursuant to the said Order and Decree, a PUBLIC AUCTION will be HOLDEN at the ROYAL POLBEROU MINES, otherwise the ST. AGNES CONSOLIDATED MINES aforesaid, on Tuesday, the 15th day of February next, and following days, at Eleven o'clock in the forenoon of each day, for SELLING, either together or in lots, the under-mentioned

MINING MACHINERY AND MATERIALS—viz.: 3

SIX STEAM-ENGINES—

1 80-inch cylinder PUMPING ENGINE, 9 feet stroke, with three boilers, about 36 tons, the first piece of rod, and iron balance bob.

1 60-inch cylinder PUMPING ENGINE, 8 feet stroke, with three boilers, about 33 tons, two balance-bobs, and the first piece of rod.

1 36-inch cylinder DOUBLE-ACTING STAMPING ENGINE, 10½ feet stroke, and three boilers, about 35 tons, two fly-wheels, about 30 feet in diameter, with wrought-iron arms and sweep-rod, for working 96-heads, wrought-iron lifters, 6 cast-iron and 2 oak axles, and 24 oak frames.

1 22-inch cylinder WHIM-ENGINE, with two boilers, about 12 tons.

1 18-inch cylinder WHIM-ENGINE, with two boilers, about 16 tons.

1 16-inch cylinder WHIM-ENGINE, with one boiler, about 8 tons.

The whole of the above Engines have Brass Air-Pumps and Buckets.

A SAW-MILL, with water-wheel, 28 feet in diameter, and 20 inches breast, cast-iron fly-wheels, and oak axles and frames.

5 Capstans and shears; about 700 fms. of capstan and cat-head ropes, from 16½ inches and under; 1800 fathoms of whim-ropes and chairs, of various sizes; 230 fms. of wire rope; 6 horse-whims; about 300 fathoms of PUMPS, of the following dimensions—viz.: 18, 14, 13, 12, 9, and 8 inches diameter; with plunger-poles, windbores, working barrels, H and top doorpieces, clack seatpieces, and brass buckets, plunger-pole cases, stuffing-boxes and glands, several hundred fathoms of ladders, 33 tram-waggons, 118 fathoms of 15-inch new oak rods, several hundred fathoms of flat and connection-rods, of various sizes, 600 fathoms of launders, about 2300 fathoms of tramroad iron, machine, horse, and winze kibbles, water barrels, a large quantity of stands and pulleys, wheel and hand-barrows, ore hutches, buddles, frames, and trunks, miners' chests, about 4 tons of old brass, several bundles of steel, 25 tons of NEW IRON, staples and glands, strapping-plates, of various lengths and sizes, boiler and kibble plates, stamps-heads and lifters, air-pipes, pulley blocks, iron and wood axles, weighing machine, 6 beams and scales, steel-yards, brass and iron weights, new and old shovels, riddles, pick and shovel hilts, sheet-lead, white-lead, safety fuse, engine-shag gunpowder, candles, brass clacks, seats, and rings, ditto bearings, ditto valves, ditto poles, of 3½ and 2½-inch diameter, ditto air-pumps and buckets; 6 smiths' bellows, of the following dimensions—viz., 1 42-inch, 1 40-inch, and 4 36-inch; 5 anvils, 3 vices, smith's crane, punching engine, screwing stocks, taps, and plates, mandril, boring machine, a large quantity of smiths' and miners' tools, 2 grinding-stones, carpenters' benches, several tons of old wrought and cast-iron, a large quantity of old timber, old ropes, dials and stand, and a great variety of other materials in general use in mines. Also, FOUR CART HORSES and HARNESS, 4 carts and wheels, chaffing machine, and the whole of the ACCOUNT-HOUSE FURNITURE.

For viewing the same, application may be made to Capt. Evans, of St. Agnes; or Mr. Morriss, at the mines; and for further particulars (if by letter, pre-paid) to Messrs. Grylls and Hill, solicitors, Helston; or to Messrs. Hodge and Hoskin, solicitors, Truro.

Dated Registrar's Office, Truro, the 12th day of January, 1848.

BOSSULION MINE, GRAMPOUND, in the parish of CREED.—Superior 34-inch STEAM-ENGINE, with cylinder, complete, boiler, about 13 tons, and other MINING MATERIALS.—TO BE SOLD, BY AUCTION, by D. H. HAINSSELIN, on Friday, the 21st January inst., at BOSSULION MINE, GRAMPOUND, in the parish of CREED, all the excellent

MATERIALS ON THE ABOVE MINE: 4

Comprising an excellent 34-in. STEAM-ENGINE and CYLINDER, complete; 1 boiler, about 13 tons; capstan and shears, nearly new; 2 horse-whims, 2 7-inch whim ropes; 1 10-inch capstan rope, 6 10-inch pumps, 19 4-inch ditto, 1 9-inch working barrel, 1 10-inch ditto, 1 11-inch doorpiece, 1 10½-inch ditto, 1 11-inch windbore, 1 10-inch ditto, 2 pairs smiths' bellows, 2 anvils, 2 vices and screw stock, mandril, smith's horse, 35 10-inch connecting-rods, 20 bracket ditto, 5 by 4½ inches, with plates and pins to match, pair of excellent iron blocks, grindstone and frame, carpenters' benches, cross-cut saw, a large assortment of TIMBER, in new balk, plank, &c., about 2 tons of new and old wrought-iron, miners', carpenters', and smiths' tools, gad, cast and blister steel, of various sizes, barrel of rape oil, nails, of various sizes, miners' chests, safety fuse, mine bell, brick, slate, &c., and the whole of the ACCOUNT-HOUSE FURNITURE.

The whole of the above materials are in excellent condition, and well worth the attention of mining agents.—Sale to commence precisely at Eleven o'clock.

1, St. Aubyn-street, Devonport, Jan. 7, 1848.

VALUABLE PUMPING AND WINDING ENGINES FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT, at WHEAL VOR MINE, in the parish of BREAGE, CORNWALL— 7

1 80-inch DRAUGHT ENGINE, 10-feet stroke in cylinder, and 8 feet in shaft; main beam and caps, top nozzle, spring piston and rod—all new this year; with four boilers, of 12 tons each, in excellent repair.

1 80-inch DITTO, 10 feet stroke in cylinder, 7½ feet in shaft, cylinder, plates, bottom and cover, nearly new, with two boilers, of 12 tons each, and three boilers, of 10 tons each, all lately thoroughly repaired.

1 49-inch DITTO, 9 feet stroke in cylinder, and 7 feet in shaft, without boilers.

1 30-inch WINDING ENGINE, 5 feet stroke, with two boilers, of 4 and 6 tons, and vertical cage, all in complete repair—the boilers and some other parts nearly new.

1 18-inch DITTO, 4 ft. stroke, with one boiler, of 5 tons, and horizontal cage, complete.

Several TONS of straight and turned STEAM-PIPES.

3 12-head CAST-IRON STAMPS AXLES, with bearings, oak frames, &c., complete.

A powerful WEIGHING MACHINE, nearly new, comprising every requisite.

An immense number of PUMPS, matching-pieces and windbores, 12 to 17-inch bore, with working barrels, doorpieces, H-pieces, cases, with stuffing-boxes and glands to match, from 11 to 19 inches bore, and plunger-poles, from 12 to 19 diameter.

Faggotted rod and cap plates, 6, 7, and 8 inches wide, staples and glands, eyerunners, caps, saddles, troughs and gudgeons for balance and other bobs.

Application to be made to Capt. R. Blight, Jun., on the mine.

Dated Nov. 29, 1847.

N.B.—The above are of easy transit to Hayle wharf, and from thence on ship-board, if required.

TO BE SOLD, BY PRIVATE CONTRACT, the SETT and MATERIALS of EAST RELISTIAN MINE, situate in the parish of GWINEAR, in the county of CORNWALL.—This mine is suspended, in consequence of the pecuniary difficulties of some of the chief shareholders, whilst its prospects were never so encouraging. Copper ores, to a considerable amount, have already been risen, and the mine appears increasingly productive as it is being wrought in depth. 6

The speculation offers an excellent opportunity to a company who can raise but a small capital, as the workings may at once be prosecuted to a great extent on ore ground already developed, and without the aid of any additional materials. The engine is of 30-inch cylinder, and, together with the pitwork, are nearly new.

Application to be made to Capt. John Lenten, the manager, Poole, near Redruth; or to Mr. J. D. Vivian, the purser, Roseworthy, near Camborne.

VALUABLE MINING MATERIALS FOR SALE, BY PRIVATE CONTRACT, at TING-TANG CONSOLS MINE, in the parish of GWENNAP—consisting of a 60 and 100-inch combined cylinder STEAM-ENGINE, 9-ft. stroke in cylinder, and 8½-feet in shaft, with three boilers, about 33 tons, which may be sold together or separately, capstan and shears, and large balance-bob, complete.

1 16, 18 15, 2 10, and 1 9-inch pumps; 1 15, 1 12, and 1 9-inch working barrels.
2 15-inch plunger-poles, 11 and 10 feet long; 1 16 and 1 15-inch pole cases.
1 15, 1 14, & 1 10-inch stuffing-boxes and glands; 3 15, 3 14, & 1 12-inch windbores.
3 16, 1 15, and 2 14-inch doorpieces and doors; 1 17, 1 15, and 1 10-inch H-pieces.
Brass seatings and clacks; 2 pairs of large yokes. 7

To treat for the same, apply to Captain Henry Crowgey, on the mine; Capt. Richards, Redruth; or to Mr. Clyma or Mr. Edsall, Truro.

Dated Ting Tang Mine, Jan. 5, 1848.

VALUABLE AND EXTENSIVE COLLIERIES, MACHINERY, COLLIERY PLANT, FARM, and LANDS, near ST. HELEN'S.—TO BE SOLD, BY PRIVATE TREATY, in consequence of the death of the surviving partner in the firm of Speakman, Caldwell, and Co., all those old established and well-known COLLIERIES, called the GERARD'S BRIDGE, COWLEY HILL, and LITTLE COWLEY HILL COLLIERIES, comprising the following SEAMS of COAL—namely: 8

THE LITTLE MINE, or HIGHER DELF.
THE RAVENHEAD MAIN DELF.
THE ST. SEBASTIAN MINE.
THE SIR JOHN MINE.
THE FLAGGY DELF.
THE RUSHY PARK DELF, and
THE LITTLE MINE, or YARD MINE.

The above-mentioned collieries are in full operation, and in good working order—producing, at present, upwards of 100,000 tons per annum, and are held under leases from various parties, and for various terms—subject to the payment of annual rents and periodical admeasurements. The quantity of coal remaining ungotten is estimated at about 1,000,000 tons, which are laid dry by the present winnings.

The capabilities and operations of the concern may be very considerably extended by a moderate outlay of capital, in a new opening, on the deep of the present levels.

The machinery and general working stock are in a very efficient state, and will be sold with the mines.

The collieries are situate on the banks of the Sankey Canal, and have a branch railway from the mouths of all the pits, communicating with the St. Helens and Runcorn Gap Railway. They have been established for a period of upwards of 30 years, and enjoy an old and valuable connection amongst the glass, alkali, and other manufactories in the immediate locality, and also in the salt districts of Cheshire, besides an extensive steam and export trade at the port of Liverpool.

There is attached to the collieries a FREEHOLD FARM, known as LITTLE COWLEY HILL ESTATE, containing 21 statute acres (very eligibly situated for building purposes), with a good HOUSE and suitable OUTBUILDINGS, now occupied by Mr. Henry Taylor, agent of the colliery, and may either be taken by the purchaser of the collieries, or the trustees will dispose of it separately.

Further information may be obtained on reference to J. Langshaw, Esq., of the Hollins, near Bolton-le-Moors; Mr. John Mercer, colliery surveyor, St. Helens, at whose office the plans of the workings are kept, and may be inspected; or for full particulars, and to view the property, to Mr. Taylor, the agent, on the premises; or to J. Ansdell, Esq., solicitor, St. Helens.—Jan. 1848.

TO COLLIERY OWNERS, IRONMASTERS, & OTHERS.—TO BE DISPOSED OF, BY PRIVATE CONTRACT, a LEASE of a COLLIERY, and about TWO HUNDRED ACRES of LAND, with the COLLIERY PLANT, situate in SOUTH WALES, on a line of railway communicating with a sea-port.

The estate is in the heart of the Great Anthracite District of South Wales, and abounds in anthracite coal, of the best quality, and also in iron mine; and is peculiarly well adapted for the site of blast-furnaces.

The land is let to respectable tenants, at rents which already go far to meet the dead rent of the whole; and, from the improvable nature of the property, they may be considerably increased.

The lease, which has 91 years to run, contains covenants very favourable to the lessee, and the royalties are unusually low.

Liberal terms will be afforded for the payment of the purchase-money. 9

For particulars apply to the following:—

London—Messrs. Clarke, Fynmore, and Fladgate, solicitors, Craven-street, Strand.
Swansea—W. P. Struvé, Esq.
Llanelly—E. E. D. Grove, Esq.
Birmingham—Messrs. E. and C. Robins and Co.

COLLIERY ENGINE.—TO BE SOLD, a HIGH-PRESSURE (18-horse power) STEAM-ENGINE, adapted for winding and pumping—cylinder 18 inches diameter, 3 feet stroke; fly-wheel, 15 feet diameter; cylindrical boiler, 22 feet long, 5 feet diameter, with valves, &c.—made by one of the first engine-makers in England. 10

Further particulars may be obtained, and the engine seen, by application to John Graham, the overseer, at the Rushes Colliery, in the Queen's County; of William Brophy, Esq., solicitor, No. 14, Talbot-street, Dublin; or of Joseph Hedley, Esq., C.E., No. 29, Bucklersbury, London.

The colliery is situated between Athy and Castle Comer—distant about 8 miles from Carlow.

LAXEY MINES, ISLE OF MAN.—TO BE SOLD, BY PUBLIC AUCTION, by order of the Court of Chancery, at the instance of the Receiver of the assets of the Isle of Man Joint-Stock Banking Company, on Monday, the 31st of January 1848, at Twelve o'clock noon, in the Wellington Hall, Douglas, THREE SHARES, and FOUR-SEVENTHS of a SHARE, in the LAXEY MINES, carried on in the parish of Lonan, in this island. 11

These mines, which are held under lease from the Government, including the whole parish of Lonan, are well known to produce the richest ore in this island—the property in which is divided into 20 shares.

A large sum of money has been expended in improvements, and in the erection of new and substantial machinery, which are nearly completed, and by which the mine will be placed in a most efficient working state—superior, in every respect, to what it has ever previously been in. The average raisings of ore for the last 12 months have been 50 tons of lead, and 200 tons of black-jack, per month, which is, at least, one-third more than has been raised within any 12 months previous. The stock in hand is valued at upwards of £4000, to a proportionate share whereof the purchasers of the above shares will be entitled.—The mine can be seen upon application to Capt. Rowe, the manager, at the mines, who will give such information as may be required; and further particulars may be had from the Receiver. SENHOUSE WILSON, Advocate, Douglas.

Isle of Man, Dec. 22, 1847.

STRONG MIXING PIG-IRON.—The YSTALYFERA IRON COMPANY beg to solicit ORDERS for their ANTHRACITE PIG-IRON. This iron mixes well with Scotch pig—imparting to it strength and elasticity, and receiving from it a portion of its softness and fluidity. No. 3 Pig is recommended for mixing with soft iron—Nos. 1 and 2, for machinery castings, requiring great soundness and strength. At this period, when cast-iron is so much employed in the construction of bridges and other buildings, requiring all the strength and elasticity which the best mixture of metal will afford, it may be interesting to call attention to the characteristics of ANTHRACITE PIG-IRON, as REPORTED on by that great practical authority, the late DAVID MUSHET, Esq., M.I.C.E.:— 12

"It greatly exceeds, in *strength*, in *defective* powers, and capacity to resist *impact*, any iron at this time manufactured in the United Kingdom."

"It now only remains for me to mention a property peculiar to this iron, which was noticed at the time I made the trial experiments, four years ago, but which has been more fully developed in those more recently made. The property referred to is one of *great springiness*, or *elasticity*, which communicates a tendency to the bar, in deflecting and breaking, to resume its rectangular form. Bars that had obtained a permanent set of 2-10ths, when afterwards broken, presented but a slight deviation from a right line; and in no case, did the curvature exceed one-fourth of a tenth."

"It was also remarked, that most of the fractures, in breaking, presented a *regularity of grain* throughout, resembling the structure of *unhardened steel*."

THE YSTALYFERA IRON COMPANY,
Dated June 22, 1847. *Near NEATH, SOUTH WALES.*

HOT-BLAST WITHOUT COAL, LABOUR, OR REPAIRS.
DIXON AND BUDD'S PATENTS.

Apply for particulars, or to inspect the process in operation on six blast-furnaces, to J. Palmer Budd, Esq., Ystalyfera Iron-Works, near Neath. 13

Dated June 22, 1847.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY, 33, *HAWLEY-ROAD, KENTISH TOWN, LONDON*, 14 to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

TO MINE AND COLLIERY COMPANIES AND PROPRIETORS.—TWO SURVEYORS, thoroughly competent, are desirous of undertaking the SURVEYS of MINES and COLLIERIES, on terms advantageous to those who may have occasion for their services.—SALES or PURCHASES of SHARES in the above attended to with promptness and punctuality, on the usual commission.

3, Cannon-row, Westminster. DE WINTON & BONE, Surveyors. 15

PATENT ALKALI COMPANY.—TO BE SOLD, a FEW PREFERENCE SHARES in this most eligible undertaking.—For further information, apply (by letter) to "F. B. A.," at the office of the *Mining Journal*, 26, Fleet-street, London. 16

FOR SALE, BY PRIVATE CONTRACT—A single-acting PUMPING-ENGINE—cylinder 30-inch diameter, 9-feet stroke, equal beam, with 7-ton boiler, cisterns, spring beam, and first set of rod-shafts attached, being the engine of Wheal St. Cleer.—For particulars, apply to Capt. Osborne, Liskeard; Mr. West, engineer, St. Blazey; or Mr. Rendle, the purser, 13, Octagon, Plymouth. 17

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS. 18

MR. R. TREDINNICK, THREE KING'S COURT, *LOMBARD-STREET, LONDON*, Continues to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously upon personal application.—MONEY ADVANCED upon the above securities. 19

JAMES LANE, MINING SHARE DEALER, 75, *OLD BROAD-STREET, LONDON*. 20

MONEY.—MESSRS. KILLICK & CO. (late WINSTANLEY, KILLICK, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Scrip, and Debentures, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.

6, Bank Chambers, opposite the Bank of England. 21

GREAT ALVIGGAN MINE, near ST. AUSTELL.—The holders and proprietors of shares in the OLD COMPANY are hereby requested to SEND in their CLAIMS FOR REGISTRATION, and PAY-UP all COST in ARREAR, in respect of such shares or interest, on or before the first day of February next; in default of which, they will be peremptorily excluded from all participation or benefit in the new company, now being formed.

C. F. KIRKMAN, Trustee and Manager.
Great Alviggan Mine, near St. Austell, Jan. 6, 1848. 22

GREAT WHEAL FREDERICK, LINKINGHORNE.—FIVE HUNDRED SHARES in this mine TO BE SOLD, at £2 per share—the whole amount to be paid into the funds for working the mine, according to a resolution at the last general meeting of the adventurers. 23

Apply to Mr. James Lane, sharebroker, 75, Old Broad-street, London; or to Captain John Spargo, Downgate, near Callington, Cornwall.

HOLYFORD COPPER MINING ASSOCIATION.—The HALF-YEARLY GENERAL MEETING of shareholders of this association will be HELD at the office, 34, Great Winchester-street, on Wednesday, the 26th January inst., for the election of directors, in place of Edward Hunt, Frederick Le Mesurier, and Charles Hunt, and auditors, in place of Arthur Hunt and William Brock, whose term of office then expires, and for the ordinary business of the association. 24

London, Jan. 13, 1848. J. W. BUCKLAND, Jun., Secretary.

ST. JOHN DEL REY MINING COMPANY.—Notice is hereby given, that the ELEVENTH HALF-YEARLY DIVIDEND, being TEN SHILLINGS per share, on the shares in this company, will be PAID at this office on Thursday, the 20th January, 1848, and any succeeding day, between the hours of Ten and Four.—Forms for claiming the dividend may be obtained at the company's office, and must be left three clear days' for examination previous to payment. 25

8, Tokenhouse-yard, Dec. 13, 1847. For the Secretary—W. ROUTH.

TAMAR SILVER-LEAD MINING COMPANY—SMELTING DEPARTMENT.

Notice is hereby given, that the INTEREST, up to the 31st December last, at 5 per cent., on the DEBENTURES of this company, will be PAID on Wednesday, the 19th inst., and on following Wednesdays, between the hours of Twelve and Four. 26

44, Finsbury-square, London, Jan. 6, 1848.

TRENANCE MINE (divided into 2000 shares).—TO BE DISPOSED OF, ONE HUNDRED and NINETY-FIVE SHARES in the ABOVE MINE, either together or in part. The last price quoted is £50 per share, but a reduction would be made in taking a parcel.—Apply to Mr. James Innes, Queen's Arms Hotel, Cheapside, London. 27

RHYMNEY IRON COMPANY.—At the General Meeting of proprietors, held at the company's offices, on the 17th of November last, it was unanimously resolved,—That the following dividend be declared, out of the profits of the year ending the 26th June last, payable on the 27th inst.—viz., £2 10s. per share upon the original £50 shares; and interest, at the rate of 5 per cent. per annum, to the 26th June last, upon the 1st instalment of £4 on the new £15 shares.

Notice is, therefore, hereby given, that the said DIVIDEND (less income tax) will be PAID on the 27th inst., at the company's offices, 7, Laurence Pountney-hill, to the proprietors of all shares upon which the calls shall have been paid.

The holders of scrip certificates, of the £15 shares, are requested to send the same to the company's offices, with their name and address in full, on or before the 20th inst., that the shares may be registered accordingly.

The transfer books will be closed from the 27th to the 29th inst. 28

THOS. WILSON, Chairman.
7, Laurence Pountney-hill, Jan. 13, 1848. T. E. SCUDAMORE, Secretary.

THE PATENT SAFETY FUSE, FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the SAFEST, CHEAPEST, and most EXPEDITIOUS MODE of effecting this very hazardous operation. From many testimonies to its usefulness with which the manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c.:—"I am very glad to hear that my recommendations have been of any service to you; they have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this." 29

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall.

ADCOCK'S PATENT SPRAY PUMP.—This important INVENTION having been PERFECTED, and brought into SUCCESSFUL PRACTICAL OPERATION, the PATENTEE is ready to RECEIVE, and to execute, ORDERS.—Apply to Henry Adcock, C.E., at his offices, No. 3, Northumberland-street, Strand, London, where pamphlets, descriptive of the invention, may be had; at the office of the *Mining Journal*, 26, Fleet-street; and through any respectable bookseller—price 30

CALEDONIAN RAILWAY—LOANS ON DEBENTURES. The CALEDONIAN RAILWAY COMPANY are prepared to RECEIVE TENDERS OF LOANS ON DEBENTURES, in sums of not less than £500, for three or five years—bearing interest at the rate of 5 per cent. per annum, payable half-yearly, in Edinburgh, Glasgow, London, Liverpool, Manchester, or Bristol.

Tenders to be addressed to this office. Parties may also communicate personally with Messrs. Foster and Braithwaite, 68, Old Broad-street, London.

By order of the directors, D. RANKINE, Treasurer.
Caledonian Railway Office, 122, Princes-street, Edinburgh, March 26, 1847. 31

TO RAILWAY ENGINEERS, CONTRACTORS, AND OTHERS.—The ADVERTISER having obtained her Majesty's Letters Patent for an IRON TRUSS BRIDGE, peculiarly adapted, from its great strength and economy, for RAILROADS, is ready to TREAT with such companies, and other persons, as may feel disposed to adopt it. This bridge has been put up in the United States, on the New York and Harlem railroad—it being one of 70 feet span, and weighing only 13 tons; and is highly approved of by the directors—in consequence of which several other companies are giving their orders for its erection. 32

A model can be seen, and further particulars given, either personally or by letter, on application to Mr. S. Moulton, care of the Editor of the *Mining Journal*, 26, Fleet-street.

RAILWAY ACCIDENTS.—The PRACTICABILITY of our "MEANS OF COMMUNICATION BETWEEN THE GUARDS (or passengers) and ENGINE-DRIVER," as well as our ELECTRIC TELEGRAPH, and arrangements, may be seen by applying to BRETT & LITTLE, Furnival's Inn, London. 33

PEAKE'S TERRO-METALLIC TILES, PIPES, &c., of at least ONE HUNDRED SORTS AND SIZES.—In addition to the numerous purposes to which it is applied already, this MATERIAL may be MOULDED into a great VARIETY of ARTICLES, required, either at home or abroad, by the Nobility, Clergy, Gentry, Architects, Civil Engineers, and Builders; also by Owners and Occupiers generally of Land, Mines, Railways, Buildings, Gardens, and other property.—See advertisement, with figures, in *The Builder*, of the 2d, 16th, and 30th Oct. and 13th Nov. last., also the 1st inst. Lists, are ready, containing prices, both per number and also per square, per yard, per foot, &c.—Applicants would oblige, by stating, if they want the prices in London or in Staffordshire. 34

4, Wharf, Macclesfield-street South, City-road Basin, London.

SIR JAMES MURRAY'S FLUID MAGNESIA.—Prepared under the immediate care of the inventor, and established for upwards of 30 years.—This elegant preparation is recommended in all cases of bile, acidities, indigestion, gout and gravel, as the most safe, easy, and effectual form in which magnesia may—and, indeed, the only one in which it ought—to be exhibited, possessing all the properties of the magnesia now in general use, without being liable, like it, to form dangerous concretions in the bowels, it effectually cures HEARTBURN without injuring the coats of the stomach, as soda, potass, and their carbonates are known to do; it prevents the food of infants turning sour; in all cases it acts as a pleasing aperient, and is peculiarly adapted to females. It has long been known that the most serious consequences have frequently resulted from the use of solid magnesia, which has been proved by Mr. Brande and many other eminent chemists, to form concretions in the bowels, endangering, and, in some instances, destroying life.—Sir HUMPHREY DAVY testified that this solution forms soluble combinations with uric acid salts in cases of gout and gravel—thereby counteracting their injurious tendency, when other alkalies and even magnesia itself, had failed.

From Sir PHILIP CRAMPTON, Bart., Surgeon-General to the Army in Ireland:—"DEAR SIR,—There can be no doubt that magnesia may be administered more safely in the form of a concentrated solution than in substance; for this, and many other reasons, I am of opinion that the fluid magnesia is a *very valuable* addition to our Materia Medica.—PHILIP CRAMPTON."—Sir J. Clarke, Sir A. Cooper, Dr. Bright, and Messrs. Guthrie, and Herbert Mayo, of London, strongly recommend Murray's Fluid Magnesia, as being infinitely more safe and convenient than the solid, and free from the danger attending the constant use of *soda or potass*.

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Letter from J. MURRAY, Esq., Lecturer on Chemistry, F.S.A., P.L.S.:—

"DEAR SIR JAMES,—Many years have elapsed since you first showed me, in your laboratories, your super-carbonate, or soluble magnesia, and demonstrated experimentally the remarkable quantity of pure magnesia held in transparent solution. It was then new to me, as it was to the chemical world, and I speak advisedly, as a practical chemist. I believe its medical value cannot be too highly estimated; and I am satisfied that the public is under an infinite debt of gratitude to you for those invaluable researches, which have been the means of its introduction. Not to mention its more obvious healing virtues, I believe it to be almost, if not altogether, a specific for lithic acid concretions, when used in the pure condensed solution invented by you.

'Believe me to be your's, faithfully, JOHN MURRAY, F.S.A.

"To Sir James Murray, Dublin. Portland-place, Hull, Aug. 30, 1839."

The following testimonial of the celebrated "Distin Family," who are well known to her Majesty and the nobility of England proves the great value of Sir James Murray's fluid magnesia, and is very encouraging for delicate persons going to sea:—

"SIR,—Having arrived from Glasgow, per the steam-ship *Jupiter*, in this stormy season, without the slightest sea sickness, we feel bound to attribute this exemption to the most agreeable *effervescent draughts* of your solution of magnesia and acidulated syrup, which were kindly furnished to us by that attentive officer, Capt. Ellis. Upon all former occasions we were martyrs to sea sickness, and we think it a great blessing that travellers may now enjoy such health and comfort at sea, as we derived from the use of this *delightful drink*.

"THE DISTIN FAMILY.

"To Sir J. Murray. Tuthill's Hotel, Dawson-street, Dublin, Feb. 19, 1839."

From Dr. KENNEDY, Master of the Lying-in Hospital, Dublin:—

"DEAR SIR,—I consider the fluid magnesia to be a *very valuable* and *convenient* remedy in cases of irritation or acidity of the stomach, but more particularly during pregnancy, febrile complaints, infantile diseases, or sea sickness."

In addition to the above, Professor Duncan, of Edinburgh, in his extensive practice, established its efficacy for removing acidities—allaying irritation of the stomach or urinary organs, and for dissolving lithic concretions and uric salts; and, consequently, as the best remedy for gravel and gout.

CAUTION.—In order to avoid the danger of concretions and sediments, which resul from the use of over-saturated and unchemical compounds, made by non-medical persons, the public will please to observe, that Sir James Murray's pure fluid magnesia is prepared of that proportion of strength which is conformable to the laws of chemical equivalents, and which has been proved, in hospital and private practice, during the last 30 years, to be the best adapted for the human stomach, and the most suitable for the treatment of females and children.

Sold by the sole consignee, Mr. WILLIAM BAILEY, of North street, Wolverhampton, and all wholesale and retail druggists and medicine agents throughout the British empire, in bottles, 1s., 2s. 6d., 3s. 6d., 5s. 6d., 11s., and 21s. each. The acidulated syrup, in bottles, 2s. each.—N.B. Be sure to ask for "Sir James Murray's Preparation," and to see that his name is stamped on each label, in *green ink*, as follows:—"James Murray, Physician to the Lord Lieutenant."

On the concealed cause that preys on the health and shortens the duration of human life. Illustrated with coloured engravings.—Just published, in a sealed envelope, Price 2s. 6d., or free by post, 3s. 6d.,

CONTROL OF THE PASSIONS: a Popular Essay on the Duties and Obligations of the Married State—the disqualifying impediments and consequent disappointment of marital anticipations—the physiology, use, and abuse of the passions—injurious results of precocious exertions and excesses—the concealed cause of sexual debility, and the infirmities of the reproductive organs—with advice to those suffering from excessive indulgence in a secret vice, or from infection; and remarks on gonorrhœa, gleet, stricture, and syphilis. Illustrated with coloured engravings and cases. By CHARLES LUCAS & Co., Consulting Surgeons, 60, Newman-street, Oxford-street, London, Member of the London College of Medicine, &c.

CONTENTS OF THE WORK.

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Chap. 1. Bodily and mental exhaustion induced by inordinate indulgence of the passions, illustrated with coloured engravings.—Chap. 2. Baneful results of a secret vice on the mind and body, evidenced in the production of consumption, epilepsy, and other convulsive diseases. Insanity, idiotcy, moping melancholy, indigestion, stricture, impotence, and sterility, with observations on the duties of married life, and on the unhappiness caused by unfruitful unions.—Chap. 3. Debility and exhaustion of the principal vital functions, the nature and treatment of impotence and sterility, and the imperfect performance of the marital act, caused by the practice of self-indulgence.—Chap. 4. Gonorrhœa, its symptoms, complications, and treatment; gleet, stricture, and disease of the prostrate.—Chap. 5. Syphilis, and its attendant maladies and treatment. Cases, and concluding observations, plates, &c.

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At home from Ten till Two, and from Five till Eight. Immediate replies sent to all letters, if containing the fee of £1 for advice, &c.: 60, Newman-street, Oxford-street, London.

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SELF-PRESERVATION: A Medical Treatise, on the Physiology of Marriage, and on the Secret Infirmities and Disorders of Youth and Maturity, usually acquired at an early period of life, which enervate the physical and mental powers, diminish and enfeeble the natural feelings, and exhaust the vital energies of Manhood; with Practical Observations on the Treatment of Nervous Debility, whether arising from these causes, close study, or the influence of tropical climates; local and constitutional weakness, syphilis, stricture, and all diseases and derangements resulting from indiscretion; with 40 coloured engravings, illustrating the Anatomy, Physiology, and Diseases of the Reproductive Organs, explaining their various structures, uses, and functions, and the injuries that are produced in them by solitary habits, excesses, and infection.

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BY SAMUEL LA'MERT, M.D., No. 9, BEDFORD-STREET, BEDFORD-SQUARE, Doctor of Medicine, Matriculated Member of the University of Edinburgh, Licentiate of Apothecaries' Hall, London, Honorary Member of the London Hospital Medical Society, &c.

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"Unquestionably this is a most extraordinary and skilful work, and ought to be extensively circulated; for it is quite evident that there are peculiar habits acquired at public schools and private seminaries, which are totally unknown and concealed from the conductors of those establishments, and which cannot be too strongly reprobated and condemned. The engravings that accompany the work are clear and explanatory; and being written by a duly-qualified medical practitioner, will, doubtless, be the means of saving many a youth, as well as those of maturer age, from the various evil consequences resulting from early indiscretions."—*Magnet*.

Sold by Kent and Richards, 52, Paternoster-row; Hannay, 63, Oxford-street; Starie, Tichborne-street, Haymarket: Mansell, 115, Fleet-street; Gordon, 146, Leadenhall-street; or free by post, for 42 stamps, from the author's residence, who may be consulted personally (or by letter) on these disorders daily, from 10 till 2, and from 5 till 8.

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THE SILENT FRIEND: a medical work, on the infirmities and decay of the generative system, from excessive indulgence, infection, and the inordinate use of mercury, with remarks on marriage, and the means of obviating certain disqualifications, illustrated by 26 coloured engravings. By R. & L. PERRY & Co., 19, Berners-street, Oxford-street, London. Published by the authors; sold by Strange, 21, Paternoster-row; Hannay, 63, and Sanger, 150, Oxford-street; Starie, 23, Tichborne-street, Haymarket; and Gordon 146, Leadenhall-street.

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PART THE FIRST treats of the anatomy and physiology of the reproductive organs, and is illustrated by six coloured engravings.—PART THE SECOND treats of the consequences resulting from excessive indulgence, and their lamentable effects on the system, producing mental and bodily weakness, nervous excitement, and generative incapacity; it is illustrated by three explanatory engravings.—PART THE THIRD treats of the diseases resulting from infection, either in the primary or secondary form, and contains explicit directions for their treatment. The consequences of neglect, and of the abuse, of mercury are also clearly pointed out. This section is illustrated by 17 coloured engravings.—PART THE FOURTH treats of Perry's Preventative Lotion, by the use of which the dangers of infection are obviated. Its action is simple but sure; it combines with the virus chemically, and destroys its power on the system.—PART THE FIFTH is devoted to the consideration of marriage and its duties. The causes of unproductive unions are also considered, and the whole subject critically and philosophically inquired into.

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LITERARY NOTICES.

The Railway Shareholders' Manual; or, Practical Guide to all the Railways in the World, completed, in progress, and projected. Ninth Edition, carefully revised and corrected, by HENRY TUCK. London: Effingham Wilson, Royal Exchange.

The ninth edition of this elaborate and useful work contains every information connected with the progress of railways in every part of the world, made up to the end of the past year. It appears to have been carefully revised, and a considerable quantity of new matter added to former editions. The origin, history, and progress of each line is fully described, with the several Acts of Parliament obtained, the costs, dividends, amount of loans, in addition to original capital, &c., given, with the second report of the House of Commons on Railway Acts Enactments. This report contains much valuable information, and should be carefully perused by every railway shareholder. Full instructions are given to shareholders as regards railway law, rates of commission charged by the London brokers in buying and selling shares, the stamp duty on deeds of sale or conveyance, with tables of the earnings, profits, &c., of the several completed railways, with lists of secretaries, engineers, solicitors, and other officers; and the addresses of the offices, whether in London, in the country, or abroad. In addition to which, there is given the length of tunnels, embankments, and viaducts, number of bridges, and, in fact, every possible available information. From the preface, we find that during the last session there was presented 342 railway bills, of which 190 received the Royal Assent, 35 deferred, and 117 withdrawn, or rejected. The total capital on 114 out of the 190, to be raised additional, was 34,665,324*l.*, and length, 1383 miles; and that on the deferred bills, 13,407,296*l.*, and length, 525 miles. The three prefaces, to the seventh, eighth, and ninth editions, which are all inserted, contain much valuable statistical information.

The Railway Directory for 1848; *containing the Names of the Directors and Principal Officers of the Railways in Great Britain and Ireland, derived from Authentic Sources.* By HENRY TUCK. London: Effingham Wilson, Royal Exchange.

Mr. Tuck, who has been before the public for nine successive years, as the publisher of *The Railway Shareholders' Manual*, has just brought out the above compilation, containing lists of directors and officers of nearly 200 railways, in England, Scotland, and Ireland, with such of the foreign companies as have offices in London. This little work will prove a great desideratum to all parties connected with railway property, and must have cost very considerable labour. From the known, and now long proved, correctness of Mr. Tuck's railway publications, there is no doubt of the accuracy of the work under notice, which is got up in a neat and economic form, and will prove a very useful appendage to every commercial counting-house, and the offices of gentlemen, whose business places them in communication with railway officials.

SOUTH DEVON RAILWAY—ATMOSPHERIC MODE OF TRACTION.—We are informed, that on Monday next all the trains now running from Exeter to Teignmouth, atmospherically, will run on to Newton by the same propelling power. Several successful experimental trips have been made between Teignmouth and Newton during the present week—one of which consisted of starting the trains from the main tube, direct from the station, without the aid of the auxiliary pipe; a length of about 200 yards of tubing was laid from the platform, in which a vacuum was effected, and by which the train received a sufficient impetus to propel it the distance of the crossing, about 100 yards, to the main pipe—a decided improvement over the somewhat uncertain practice of the rope and the small auxiliary tube hitherto used. Many other improvements will, no doubt, follow from experience—the natural consequence of carrying out a novel system. We have still, however, the satisfaction of stating that the atmospheric mode is found to succeed admirably; and, from what we learn, there is no doubt that this safe, rapid, and economical plan of propulsion will eventually be found to fulfil the expectations of its most sanguine supporters. In the course of a few days it will work 16 trains every day from Exeter to Newton—a distance of 21¼ miles—a strong proof of its practicability, at least; and in the meantime, the atmospheric apparatus is being rapidly finished on the line towards Totnes—and when it has been found to work that distance (29 miles), on a portion of which, very severe gradients—from 1 in 43—are laid out, we see no reason to doubt its working a line of 100 miles in length, as the extent is but the renewal of the same means. The thriving town of Newton appears to promise a second Swindon, as workshops for the manufacture of atmospheric and other machinery, large and commodious storehouses, foundries, smithies, and other buildings—all of considerable magnitude—are in course of erection, in the vicinity of the station; and no doubt the building of dwelling-houses of all descriptions will follow, so that the town and neighbourhood will be greatly improved by the South Devon Railway coming near it. The works near Plymouth are fast progressing to completion. The turnpike road over the Laira, which has been diverted and carried over the railway (a work of considerable magnitude), is nearly finished; and a great number of men are employed in the erection of the station and the necessary buildings at Laira, within two miles of Plymouth. The viaducts between this town and Ivybridge are being strengthened, to allow the passing over them of locomotive engines; but, from the nature of the work, we learn that some time must yet elapse before the inhabitants of this populous district will have the benefit of railway communication. We are, however, persuaded that the directors are doing everything in their power to urge on Mr. Brunel to get the line completed; and we shall hail with satisfaction the period when we are enabled to state officially the day on which the line will be opened. We would press on the engineer to use the utmost possible energy to finish the work, as we know that the commercial and trading portion of the inhabitants of these towns labour under many disadvantages, from the broken communication with other parts of the country. The spring is now rapidly advancing, and we hope to see every effort made by all parties concerned to give to Plymouth, Devonport, and Stonehouse, that which they might fairly have expected before—the advantage of railway travelling.—*Devonshire Chronicle*.

THE COPPER MINING COUNTRY ABOUT LAKE SUPERIOR.—The number of mining companies which purport to be in operation on the American shore of Lake Superior, and on our islands, is said to be 100, and the number of stock shares is not far from 300,000; but, notwithstanding all the fuss that has been, and is still made, about the operations here, a smelting furnace has not yet been erected, and only three companies, up to the present time, have made any shipments of ore. The oldest of these is the Lake Superior Company, the most successful, the Pittsburg and Boston Company, and the other is the Copper Falls Company, all of which are confined in their operations to Point Keweenaw. This point is at present the centre of attraction to those who are worshipping the copper mammon of the age—it is a mountainous district, covered with a comparatively useless pine forest, exceedingly rocky, and not distinguished for its beautiful scenery. As to the great majority of the mining companies alluded to, they will undoubtedly sink a good deal more money than they can possibly make; and for the reason, that they are not possessed of sufficient capital to carry on the mining business properly, and are managed by inexperienced and visionary men—a goodly number of whom have failed in every business in which they ever figured, and who are generally adventurers, determined to live by speculation instead of honest labour. The two principal log-cabin cities of Point Keweenaw, are Copper Harbour, and Eagle River; the former is quite a good harbour, and supports a vacated garrison, a newspaper, a very good boarding-house, and several intemperance establishments; the latter has a fine beach for a harbour, a boarding-house, a saw mill, and a store, where drinking is the principle business transacted. The number of resident inhabitants in the two towns I was unable to learn, but the sum total I suppose would amount to 50 souls. Altogether, perhaps, 500 miners and clerks may be engaged on the whole point; while as many more, during the summer, are hanging about the general stopping places on shore, or the working places in the interior. This brotherhood is principally composed of upstart geologists, explorers, and location speculators. From all that I can learn, about the same state of things exist on the Canada side of the lake; 20 companies are already organised for that section of the country, the most promising of which is the Montreal Mining Company, but not a pound of ore has yet been smelted, or taken to market—so that the "subject theme" for the present is as barren of real interest there as in our own territory. Rationally speaking, the conclusion of the whole matter is just this: the Lake Superior region undoubtedly abounds in valuable minerals, but as yet a sufficient length of time has not elapsed to develope its resources; three-quarters of the people (the remaining quarter are among the most worthy of the land) now engaged in mining operations, are what might be termed dishonest speculator and inexperienced adventurers; but there is no doubt that, if a new order of things should be brought into existence here, all those who are prudent and industrious would accumulate fortunes.—*Kanman's Summer in the Wilderness*.

STRAW PAPER AND THE EXCISE.—A new manufacture has been introduced into this country—namely, paper made from straw. The invention is that of Mr. Lemuel W. Wright, a native of the United States, who obtained a patent for its exclusive manufacture in this country in 1843, and at the same time sold his invention to some parties in France for a large sum of money. The material is attainable anywhere, and the price low, varying from 25s. to 60s. per ton. The object of the manufacturer was to make brown paper and mill-boards for book covers and similar purposes. Wishing, however, to have coloured surfaces to the boards, application was made to the Board of Excise to permit thin coloured paper to be procured from another mill for the purpose of being pasted on the original body, as allowed to other manufacturers. A long correspondence on the subject was carried on between the manufacturer and the Board of Excise; the board vacillating in its opinion, at one time holding out the hope that the request would be granted, and again throwing doubt on it, for about 12 months. In this time the board had come to the resolution to permit the practice. The parties were informed that their request was granted, and that they might proceed with the manufacture. But during this time the business of the concern was suspended, so far as the manufacture of this particular article was concerned; the parties suffered considerable loss, and eventually sold their patent to another manufacturer, though they had been at the expense of erecting an establishment in which to carry on the business. Necessity, the mother of invention, put the purchasers to their ingenuity, and they discovered that the original fabric might be covered with colouring matter applied with a brush. Two things were here accomplished—1st, the manufacturer saved considerably in using the colouring matter instead of coloured paper for covering his mill-boards; 2d, he had raised the important question whether his manufacture was liable to the duty on paper. It is not paper, nor yet pasteboard. The substance for which it is formed is new, and the mode of manufacturing it is different from that used in making paper or pasteboard. It is clearly a new invention, and, as such, has no right to be taxed as those articles defined in the Act of Parliament as paper or pasteboard. This opinion is further strengthened by the consideration that the manufacturer of papier-maché, an article made of the same materials, as the ordinary mill-boards, pays no duty, though he would pay a duty of 14s. 9d. per cwt. did he procure his materials from a paper-maker. The facts of this case, which we have condensed as much as possible, lead to other and more important considerations—namely, the injurious effects of the whole system of excise. Wherever an excisable article is manufactured, whether it be snuff, soap, paper, or anything else, the manufacturer is subjected to the annoyance of having an excise officer, and sometimes more than one, on his premises, obtruding in his private affairs; and what is more objectionable still, it is the personal interest of the officers to obtain convictions for any breach of the excise laws. To fair taxation we have no objection. The state must be supported by taxes of some sort; but when those taxes press injuriously upon the interests of trade, they should be abolished or amended. The article to which we have alluded to more particularly pays a duty of 120 per cent. Now, we ask, can any manufacturer pay such duties without immense injury to his trade? And further, can duties such as these be imposed without laying the temptation to defraud the revenue? Happily a party is rapidly arising in this country which will foster the agitation of the subject of excise abuses till its voice is heard and the grievances redressed.

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY	Statistical—12, St. James's-square	8	P.M.
	Chemical—Society of Arts, Adelphi	8	P.M.
	Medical—Bolt-court, Fleet-street	8	P.M.
TUESDAY	Linnæan—Soho-square	8	P.M.
	Horticultural—21, Regent-street	3	P.M.
	Civil Engineers—25, Great George-street	8	P.M.
WEDNESDAY	Geological—Somerset-house	8½	P.M.
	London Institution—Finsbury Circus	7	P.M.
THURSDAY	Royal—Somerset-house	8½	P.M.
	Antiquaries—Somerset-house	8	P.M.
FRIDAY	Royal Institution—Albemarle-street	8½	P.M.
SATURDAY	Royal Botanic—Inner Circle, Regent's-park	3½	P.M.
	Asiatic—14, Grafton-street	2	P.M.
	Westminster Medical—17, Saville-row	8	P.M.

INSTITUTION OF CIVIL ENGINEERS.

JAN. 11.—Sir J. RENNIE (President) in the chair.

The first meeting of the session was held on Tuesday evening, when a paper was read descriptive of Mr. Frederick Ransome's process for making artificial stone. The *modus operandi* appeared to be very simple. Broken pieces of silica (common flint) being subjected for a time to the action of caustic alkali, boiling, under pressure, in a close vessel, formed a transparent silicated solution, which was evaporated to a specific gravity of 1·600 (distilled water being 1·000), and was then intimately mixed with given proportions of well-washed sand, broken granite, or other materials, of different degrees of hardness. The paste thus constituted, after being pressed into moulds, from which the most delicate impressions were readily received, were subjected to a red heat, in a stove or kiln, by which operation the free or uncombined silica of the raw materials united with the excess of alkali existing in the solution, thus forming a semi-vitreous compound, and rendering the artificial stone perfectly insoluble. This production must evidently be adaptable to a comprehensive range of objects for decorative art, and for architectural purposes; busts, vases, flooring tiles, steps, balustrades, mouldings, capitals, shafts, and bases of columns, &c., even grinding stones and whetstones for scythes, have been made; and, in fact, from the beauty and variety of the specimens exhibited, there would appear to be a vast field opening for such a production. It was stated to be already extensively manufactured at Ipswich, and it was allowed to admit of extensive application where elaborately carved stone would be too expensive.

Mr. Richmond, of Bow, exhibited and explained an engine counter, manufactured by him on an improved principle. The counters in ordinary use were described as either somewhat inefficient machines, liable to error, or of too expensive construction to be generally employed. This counter differed from others chiefly in its simplicity and its accuracy, whilst, at the same time, its low price of 7*l.* brought it within the reach of every one. With this machine the number of strokes made by the engine or other machine could be read off at one view without calculation. The leading or unit hand traversed the entire circumference of the large dial, and those of the three small dials revolved in the same direction. The first motion was described as being given by a sliding bar and fixed spring, instead of by a double pallet, so that the first wheel could not be thrown more than one tooth by one stroke of the engine. The hands were all moved by a train of wheels and pinions, without skip-wheels, so that the motion was regular and progressive. These were admitted to be advantages, and in the discussion upon the machine its merits appeared to be shown very decidedly.

It was announced that the annual general meeting for the election of president, council, and officers of the institution, would be held on Tuesday, Jan. 18; and that the paper to be read on Tuesday, Feb. 1, would be "On the Drainage and Sewerage of Bristol," by Mr. James Green, M. Inst. C.E.

THE CHEMICAL HISTORY OF DISINFECTANTS.

For some time past Dr. Bachhoffner has been actively engaged in delivering, at the Royal Polytechnic Institution, a course of lectures on ventilation, respiration, &c., in connection with sanatory measures. The subject has been taken up by Dr. Ryan, who makes his lecture a sequence to Dr. Bachhoffner's, and enters at length into the chemical character of vitiated air, the nature of infection, and the history of remedial agents. The doctor, in opening his lecture, spoke as follows:—

One of the great objects of an institution like the Royal Polytechnic is to bring before the world, by means of apt illustrations, the various discoveries and applications of scientific research. Whenever it is practicable, we certainly endeavour to clothe our instructions in the most pleasing, and even amusing, guise; and where we can legitimately do so, we choose those subjects which admit of the most striking and brilliant experiments. On the present occasion, however, I am called on by a sense of public duty to lecture on a topic of such paramount importance that, although it may afford us but few illustrative experiments, and those not of a showy character, yet I am sure you will consider it worthy of your undivided attention. The preservation of health, whether considered in a national or individual point of view, is a matter of serious moment to every well-regulated mind; for while on the one hand we ought not to be influenced by a slavish fear of death or disease, yet on the other we ought to feel that in the conservation of health we are obeying a Divine law. We may admire the man who, in the cause of honour, virtue, patriotism, or science, sacrifices his health; but we look with disgust upon him who indolently or recklessly, and without some virtuous end, risks it. The object of my present lecture, then, is connected with the conservation of public and individual health. I am about to discuss the chemical history and characteristics of the various materials which have been brought prominently before the world under the name of disinfectants, to inquire into the *modus operandi* and efficacy of the principal ones, and to examine the nature of the enemies with which they have to contend; so that by teaching you yourselves to reason on the subject, I may prevent your placing too great a reliance upon an auxiliary which, in time of need, may prove a delusion and a snare. The attempted employment of means for destroying or preventing infection is of great antiquity. We find it mentioned in many of our older writers; and the scholar will recollect that the disinfecting agency of burning sulphur is mentioned in the Iliad of Homer. Let us inquire *in limine* into the true object and meaning of disinfection, for sad confusion seems to attend the application of the term even by medical men themselves. Disinfection then does not consist simply in removing from the atmosphere unpleasant odours, or even poisonous or health-destroying chemical compounds, arising from the decomposition of animal and vegetable matter, unless we are prepared to refer infection primarily to such agencies. To deodorise and to disinfect are not the same thing: and it is a fatal error to confound the terms or the processes. We know, that although certain injurious and fœtid gases are generally found in a fever-exciting atmosphere, yet disease may exist to a frightful extent, as in the cases of certain well-known endemics and epidemics, and yet the atmosphere give no indications of any unusual amount of impurity. Malaria, or poisonous miasmata, whether arising from an African swamp or from the body of a fevered patient, or from our drains and sewers, assumes guises too subtile for the detection of the medical chemist. He has yet failed to define their forms and compositions; but their identity with the fœtid products of decomposition has been disproved. Disinfection, then, depends upon more than simple deodorisation—it must effect the removal or destruction of the unknown septic miasmata; it is very evident, therefore, that we have no true disinfectant. But while we are anxious not to confound deodorisation and disinfection, and while we lament that we are unable to combat successfully with miasm, yet we must not overlook the fact, that fœtid and poisonous gases, the products of decomposition, when existing in the air, always aggravate disease, and predispose to its fatal seizure even healthy individuals—thus acting as secondary causes of infection—we have in our possession remedies for their removal. I shall, therefore, proceed to call your attention—1, to the principal poisonous and fœtid products of animal and vegetable decomposition; and 2, to the remedial means proposed for their removal. The offensive compounds given off during animal and vegetable decomposition consist of combinations of hydrogen with

Sulphur	forming	Sulphuretted hydrogen.
Phosphorus		Phosphoretted hydrogen.
Nitrogen		Ammonia.
Carbon		Carburetted hydrogen.

Of carbon with nitrogen to form cyanogen; and, again, of cyanogen and sulphur to form sulphocyanogen; and carbon with oxygen to form carbonic oxide and carbonic acid. Dr. Leesen, of St. Thomas's Hospital, has classified the products of putrescence in the following manner:—

Dangerous, but Inodorous,		Remittant Miasmata.
		Typhoid miasmata.
		Carbonic oxide.
		Carbonic acid.

He gives remittant miasmata as the product of vegetable decomposition; and typhoid miasmata as the result of animal putrescence.

Odorous, but Slightly offensive.		Ammonia.
		Carburetted hydrogen.
		Cyanogen.
		Sulphocyanogen.
Most offensive.		Sulphuretted hydrogen.
		Phosphoretted hydrogen.
		Hydrosulphate of ammonia.

The compounds which more especially demand our attention on this occasion are those headed most offensive, inasmuch as they are not only the most poisonous, but also are those which appeal most readily to our senses. Sulphuretted hydrogen, or hydro-sulphuric acid, is a compound of sulphur and of hydrogen, and is a common product of animal decomposition. It is also given off during the destruction of certain vegetables, sulphur existing largely in some families—for instance, in illiaceæ (as in garlic), in cruciferæ (as in mustard), in umbelliferæ (as in assafœtida.) I have now on the table before me a quantity of mustard seed in water, from which there is exhaling a powerful odour of hydro-sulphuric acid. This compound is gaseous at common temperatures, has the peculiar odour of rotten eggs, is heavier than air, 100 cubic inches weighing 36 grains; and, according to Dupuytren and Thenard, is so poisonous, that air containing only 1-1500th part destroyed birds, air containing 1-800th part killed a middle-sized dog; and a horse perished in an atmosphere containing 1-150th part of the gas. Taking advantage of its weight, the celebrated Thenard employed it to poison rats by pouring it into their holes. The above acid compound combines with ammonia, another product of decomposition, to form the poisonous salt, hydro-sulphate of ammonia. The two preceding compounds are distinguished by their odour, and by their action on certain metallic salts and oxides, especially on lead and bismuth. Dr. Henry found that one measure of sulphuretted hydrogen mixed with 20,000 measures of hydrogen, carburetted hydrogen, or atmospheric air, produces a sensible discoloration of white lead, or oxide of bismuth, mixed with water and spread upon a card. We shall have to notice soon that this circumstance has been laid hold of by M. Ledoyen in the manufacture and application of his (so called) disinfecting fluid. Phosphuretted hydrogen is a compound of hydrogen and phosphorus —it is heavier than air, is colourless, has a disagreeable odour like onions, and inflames upon contact with air, a property it loses by being kept over water. Phosphorus is a constituent of the animal kingdom, and exists especially very largely in bones. You will perceive that the compounds of which I have been speaking—namely, sulphuretted hydrogen, ammonia, and phosphoretted hydrogen, are all of them compounds containing hydrogen—upon the presence of that element their activity chiefly depends; and, as I shall afterwards show, you the process of deodorisation or disinfection, as it is still called, frequently depends upon the removal of the hydrogen alone. I ought also to remark that some have imagined that poisonous malaria are hydrogenous compounds. In fact the late Professor Daniel, some years ago, after analysing certain waters brought from some of the rivers or estuaries in Africa, was inclined to the same opinion, but his observations on the subject have never been confirmed. We now come to the next division of my subject—namely, the consideration of the characters, efficiency, and actions of the principal deodorisers or antibromic agents. The learned doctor then proceeded to consider the various remedial agents proposed to counteract those noxious compounds. These he classed under three heads, referring—

1. To perfumes, which he condemned as useless, if not dangerous.
2. To mechanical remedies, such as ventilation, drainage, &c.
3. To chemical agents. The principal ones referred to were chlorine, and the chlo-

rides of lime and soda, chloride of zinc, Sir William Burnett's disinfecting liquid, peracetate of iron, Mr. Ellerman's liquid, sulphate of manganese and soda, the refuse of chlorine works, patented by Mr. Young; nitric acid vapour, for which Dr. Carmichae Smyth received from Parliament 5000*l.*; nitrate of lead, or Ledoyen's liquid. The doctor mentioned here a melancholy circumstance connected with the last-named disinfectant, as it is erroneously called. Col. Calvert, who was associated with M. Ledoyen in the matter, and whose correspondence with Government was not only voluminous but most decided in its tone, relating to the power of the compound over infectious miasmata, has just fallen a victim to fever in Canada, to which place he and M. Ledoyen were sent officially to test the virtues of the liquid. The inventor himself is returning home with shattered health. Lastly, after explaining the *modus operandi* of all these agents in removing odour—a process dependant on the removal of hydrogen from its bases, sulphur and phosphorus—the lecturer concluded by emphatically begging his audience not to trust to these chemical agents, but to the more simple operations of ventilation, light, drainage, cleanliness, and temperance.

Notwithstanding the absence of any striking experiment, the learned gentleman was heard throughout his lecture with the greatest attention, and enthusiastically applauded at its conclusion. It is to be hoped that the doctor will embody the lecture, of which the above is a mere outline, in the form of a pamphlet; by so doing he will confer a benefit on those most interested in sanatory measures—namely, the public.

The History and Practice of Mining in the British Isles,

IN RELATION TO METALLURGY.

MR. ROBERT HUNT'S LECTURES AT THE LONDON INSTITUTION.

Lecture II.—The Copper Mines of Cornwall.

Mr. Hunt commenced this lecture by saying that, although copper mining in Britain, regarding it as a branch of industry, was of comparatively recent date, certain it was, that the operation itself was one of the highest antiquity. Tubal Cain, it would be remembered, was described in Holy Writ as a maker of brass; and the famous copper mine near Wadi-Magara, on the Peninsular of Sinai, according to Diodorus Siculus, were worked as early as in the time of the fourth dynasty, under Cheops Chufu. Again, the canal from Suez was attempted under Rameses the Great, the immediate object of which was, probably, to open a communication between Egypt and the Arabian copper district. The Phœnicians, doubtless, worked copper in Britain at the same time they were obtaining the Cornish tin, as *celts* and arrow heads were often found, when "streaming for tin," near old British workings, covered up to a considerable depth by the soil brought down by rain from the hills. Mr. Hunt here directed attention to some excellent specimens of these curious relics of that remote age, which were exhibited on the table. The use to which spear and arrow heads were put was obvious; but in respect to another sharp instrument often found, of which he had an exceedingly perfect specimen, great doubts were entertained, whether it was used for some warlike purpose, or as a chisel in the mining operations of the ancients. All these instruments were bronze, a composition of tin and copper; and it was somewhat singular that, whether they were found in Cornwall, or in the more northern portions of Great Britain, or in Ireland, they always contained cobalt; a wonderful coincidence with the fact, that the copper ore of Britain was often associated with cobalt. Another, and a more conclusive proof that they were made in this kingdom was the fact, that specimens were sometimes found with a portion of the clay mould, in which they were cast, adhering to them. It was probable, however, that the Phœnicians and ancient Britons never worked copper mines to any great depth; but used the surface ore and native copper which they found. The latter was to this day sometimes discovered in large masses on the serpentine rocks, which, however, never contained any lodes; and in the extensive tracts where those curious magnesian rocks were found, a copper mine never was seen. Native copper was produced in cracks and fissures of the rocks, into which it had apparently been precipitated in a metallic form. The quantity of copper raised in 1708 must have been very small, for in that year the brass manufacturers petitioned the House of Commons to encourage the brass manufacture, "on account of the inexhaustible quantity of calamine in the country, which would occasion plenty of rough copper to be brought in"—the calamine here mentioned was zinc. Copper was raised in small quantities in the reigns of Henry VIII. and Edward VI., as several Acts were then passed prohibiting the exportation of "brass, copper, latten, bell-metal, pan-metal, gun-metal, and shrof-metal." What was meant by latten was somewhat doubtful. All the dictionaries which contained the word stated it to be "tin-plate;" but he should show presently that it meant something else. [A century ago, tin mines were abandoned when the miners came to what are called "the yellows," Mr. Williams, the grandfather of the present proprietor, abandoned the Tresavean Mine, since found to be the richest copper mine in the country, when they came to "the yellows," or copper ore. Within the last 20 years, the black ore was entirely rejected as valueless, while, in fact, it was one of the richest. In the neighbourhood of Goldsithney, not more than three or four years since, there was a fence around a field built entirely of black copper ore, by taking down which, and selling it, the proprietor realised a very large sum of money.

The progress of copper mining is somewhat curious, and it might be traced by a few brief notices in ancient charters and Acts of Parliament:—Edward III. granted to John Ballanter and Walter Bolbolter all his mines of gold, silver, and copper in Devon for two years. Richard II. granted a charter in the following words:—"The King to Hugh of Burnell, and our sheriff of Salop; we are informed, by James Miner, of a mine of copper and silver in or near the lordship, or priory, of Wenlock. We assign you to ordain the said James to work the same without any let or hindrance." Henry IV. granted to Henry and John Darby the lead and copper mines holding silver in Cornwall and Devon, for 10 years, on condition of paying to the king, nine pounds of pure silver yearly; William Charleton, prior of Pilton, being made comptroller. Henry VI. made John Bottwright comptroller of all his mines of gold and silver, copper, latten and copper, latten lead, in Devon and Cornwall. Again, in the 21st year of his reign, the king granted to John Bottwright all his mines of copper, tin, and lead in Devon and Cornwall, during his good behaviour, paying the tenth part of pure gold, silver, copper, tin, and lead, with power to let or set for 12 years, paying to the king the tenth bowl of ore of copper, tin, and lead. Here they found that *latten*, or *lattice*, as it was usually called in Cornwall and Devon, meant something besides tinplate. In this grant mention was made of copper-latten and lead-latten; and, in his opinion, there could be no doubt but its real meaning was any sort of metal rolled out into thin plates. Next they found Edward IV. granting to his brother Richard, Duke of Gloucester, Henry, Earl of Northumberland, and others, mines of blanch lands, called Skildaw, in Cornwall, mines in Northumberland, and the Mine of Alston Moor, called Fetchers. The mine of Keswick, in Cumberland, and the *copper* mine near Richmond, Yorkshire, from Lady-day next, for 15 years, paying the king the eighth part neat to the lord of the soil the ninth, and to the church a tenth; and on the 11th of March, in the 18th year of his reign, the king grants, upon surrender of the former grants to William Goderswiek and Doderick Vaverswick (this was the first instance on record of German miners in this kingdom), all mines of gold, silver, *copper*, and lead, in Northumberland and Westmoreland, for 10 years, paying to the king the 15th part, and to the lord of the soil as they can agree. Henry VII., on 27th February, in the first year of his reign, made Jasper, Duke of Bedford, and other earls, the commissioners and governors of all his mines of gold, silver, tin, lead, and *copper* in England and Wales, and to answer for the profits to the king. Henry VII., there was ample evidence to show, derived large revenues by this commission. Queen Elizabeth, also, James I., and Charles I., granted other charters, to which it was unnecessary more particularly to allude.

Although copper, and other inferior metals, were mentioned in their charters, there was sufficient evidence to show, that they were never, with the exception of tin, expressly mined for; but they were often found in the mines undertaken with the view of obtaining silver and gold. There was also another exception—mines royal—of which he should speak when treating of gold.

The talented lecturer next called attention to the order and condition in which the copper ores usually occurred. Copper was found in different states, excellent specimens of which were placed on the table. Without mentioning at present the three large fragments from Lake Superior, he would proceed at once to that of Britain. Native copper, as he had before described, was a mass of malleable metal, found in slate, which often exhibited no more than 5 per cent. of impurity. The red oxide of copper was also tolerably pure; it contained 88·3 per cent. of copper, and 11·5 of oxygen. The sulphuret of copper was a very rich mineral—it contained copper, 86; sulphur, 12; and iron 2 per cent. Purple copper contained 61·07 of copper, 23·75 of sulphur, 14· of iron, and 1·18 of silica. Black ore contained 79·83 of copper, and of oxygen 20·17 per cent. Grey ore only contained 48·4 per cent. of copper, the remainder being—arsenic, 11·5; iron, 14·2; sulphur, 21·8; silica, 4·1. Blue and green ores contained about 70 per cent. of copper, in the form of a deutoxide. Copper pyrites contain 30·00 per cent. of copper, 32·20 of iron, 36·10 of sulphur, and 17·70 of silica. These were the general character of copper ores of a mercantile value; there were other rare and extraordinary varieties sometimes found, but they were of no value, except to the mineralogist, and as giving a clue to the formation of the more general varieties. These different conditions were clearly attributable to an electro-chemical action. The situation geologically of the Cornish lodes, would be perceived from the section taken across the county of Cornwall from St. Agnes Beacon to Lizard Point, by Sir Henry de la Beche, in his survey (of which an enlarged representation was exhibited). The predominant rocks are the grey slate, the granite, and the serpentine. In the centre of the granite there were two lodes, and another near the basin of the slate rock; but the greatest number of lodes occurred near the junction of the slate and the granite. At St. Agnes Beacon, however, it would appear, that there were a great many lodes without the immediate proximity of the granite; but that was not really the case, as at low water extensive formations of porphyaitic granite were perceptible. Looking at the map, a long ridge of granitic hills, forming a sort of back-bone in the centre of the county, would be seen to extend themselves as far as Dartmouth, in Devon; and the great groups of mineral veins would always be found occurring in the proximity of the granitic rocks. When the granite was in conjunction with hornblende, there was the mass of metallic lodes of Carn Brea, Carn Marth, in Gwennap. Around St. Austell, too, where the granite joined the clay-slate, copper was most extensively obtained. There was also another district, which had only been lately worked. There was a general impression formerly among miners, that no copper would be found east of Truro; but lately the Caradon district, it had been discovered, was rich in copper; and in the Dartmoor district was the Great Wheal Maria, one of the most extraordinary formations of sulphuret of copper in the kingdom. These lodes had all the same direction—not quite due east and west, but a little to the north of east, and to the south of west. When any exception to this direction occurred, the lodes were invariably lead.

This peculiar order of arrangement pointed to a remarkable physical cause, somewhat difficult of explanation, perhaps, but without doubt arising from an electro-chemical action. This was produced by the difference of temperature between the various rocks, which had been recently shown in the beautiful researches of Dr. Faraday, to produce electro, or rather magneto-chemical, conditions.

It had, indeed, been shown by Mr. W. Henwood, many years ago, that slate rock was always 2° warmer than granite; and Dr. Faraday had now found that a stream of oxygen gas, at ordinary temperature, was differently magnetic from the same gas at a lower temperature; and it was quite easy to understand how these solid masses might be arranged, so as to form the plates of a galvanic pair. Supposing, then, the ore to exist at one period in the condition of yellow ore; and that it afterwards became subjected to a low galvanic action, the grey sulphuret of copper would be produced. A very simple and beautiful experiment would show at once how readily these changes were made. Supposing a piece of yellow ore were suspended by a horse-hair, in a glass vessel which contained sulphate of copper and water, the sulphate having settled to the bottom, so that half the one should be in the one-and-a-half in the other. In a very short time a change would be perceptible in the portion subjected to the action of the sulphate, and in a week it would be found, to a considerable depth, to be converted from yellow to grey ore. These electro-magnetic transformations were often effected by a change of position. Of this there was a remarkable case in Dolcoath, where a lode, which had evidently originally been all yellow ore, had been dislocated by the introduction of "an elvan course;" and while one side remained yellow, the whole of the lode on the other side was changed to grey ore, in the condition that miners called "vughy," or hollow; and this change was, doubtless, effected by the electro-chemical power produced by the interposition of the elvan course. That the sulphuret of iron was liberated from the ore, might be proved by connecting pieces of yellow ore with a voltaic pair, and plunging them into a solution of barytes, oxide of iron accumulated around the sides of the vessel, and sulphate of barytes fell to the bottom as the ore changed its character. Thus were they enabled to imitate very nicely in the laboratory the operations produced by these subtle agents in the bowels of the earth. He had mentioned that the lodes ran all in one direction, but they were liable to great interruptions, principally from elvan courses. These appeared to be decomposed granite, or granite in a second state of fusion, ejected through the superincumbent beds of slate, and often through the granite masses themselves. [The lecturer illustrated this portion of his subject by means of a diagram.] The lodes were also interrupted by *faults (heaves)*, and which would not admit of a more particular description within the limits of an hour. The discovery of lodes was often accidental. The lode called "huel boys" was so called from being discovered by some boys at play; and that denominated "ale and cakes" was stated to be found accidentally by men who had been revelling in an abundant suppiy of those articles of consumption. Formerly the miners had great faith in the use of the divining-rod. The Virgula Divinitoria was mentioned by Agricola; and within the last 50 years Price published a book (*Mineralogia Cornubiensis*), in which he avows his firm belief in the use of the divining-rod, and gives most minute directions for its use. Within the last 6 or 7 years he (the lecturer) had seen the divining-rod used.

As was always the case in such superstitious operations, many mystic conditions were necessary. The person using the rod must be the seventh son of a seventh son. The rod itself must be a hazel or a hawthorn twig of one year's growth. If a branch forked naturally, so much the better; but, if one could not be found, two branches were bound together at one end. Each extremity of the prongs of the fork, so to speak, were then held firmly in either hand of the operator, and twisted round in such a manner as to place the muscles of the wrists in a very constrained position, The operator then went on; and when he passed over a metallic lode, or water, the rod was said to point out the spot by bending downwards. This deflection, however, was more naturally accounted for by the fatigue of the operator's wrists; and, if an opening were made in the ground by his direction, it seldom happened in a county like Cornwall that something would not be turned up to justify the sensibility of the divining rod. He once recollected a diviner directing a particular spot to be tried; and, upon digging, a British or Anglo-Saxon tomb was discovered, containing bones and *copper celts*; and a few lucky coincidences like this would naturally enough establish the reputation of the divining-rod at that period.

There were several kinds of lodes—each of more or less comparative value, and exhibiting various conditions. They were known by the names of the *gossan* lode, which contained pure oxide of iron; the *peachy* lode, which was poor in quality, and so called from the dark green stone with which it was associated; the *scovan*, a hard crystalline lode; the *capel* lode, which was a decomposed scovan; the *prian* lode, which was very fragmentary; the *quartz* or *rampant spar* lode, which was a good deal crystallised; the *killas* lode, called by the miners "tender, flat, and fleaky," and occurring always in the grey slate; the *mundic* lode, containing a great deal of sulphuret of iron; the *black jack*, or *mock lead*, lode, which was copper, mixed with zinc, and much esteemed by the miners, who had a saying, indicative of the richness of the ore, "black jack always rides a good horse;" the *flookan*, a clayey lode; and the *gronan* lode, consisting of a granitic *debris*.

As to the mode of copper mining—in the first place, no man could search for copper lodes without leave of the lord of the soil; and, when found, the lord of the soil received a due of from one-sixth to $\frac{1}{12}$th, payable in money. In lead, the dues were payable in dishes. The shaft was sunk on the lode, and levels were then driven in various directions, and the ore worked out. The mines of Cornwall were remarkable for their excellent ventilation; and, at the bottom of the deepest mines, there was always a current of pure, healthy air. This ventilation was produced by communications, made at the end of each level, with the one above it. Of course, at the end of a level, before the air communication was completed, there was carbonic acid gas, which was injurious to the health of the miner; but various plans were in use, which, in a great degree, remedied this. The Cornish miner was a being of extraordinary hardihood; often driving his galleries to a great distance beneath the bottom of the Atlantic Ocean. There was a droll story told of an old woman who proposed to sweep back the Atlantic with a broom; but in the Huel Cock Mine, near St. Just, and in the Perranzabuloe district, the miners often actually stopped out the Atlantic with a bit of oakum. They worked so near the bottom, that the water oozed through the crevices in the rock, when, by means of oakum and oxide of iron, the miners successfully stopped the influx of the water. In these workings, the miner often heard, during storms—and he (Mr. Hunt) had been in the mines, and heard them, too—the great granitic boulders at the bottom of the ocean rolled about with terrific fury overhead, making the mines resound with a din which was almost deafening.

The miners were remarkable as a moral race; and, since the time of Wesley, for their highly religious character. They had, notwithstanding many superstitions, most of which were analogous to those of the Hartz miners. For instance, both believed in a harmless sort of spirits, called *knockers*, who were said to be heard knocking as though they were miners at work in the centre of the solid masses of the mine. Such noises, however, were naturally enough accounted for by the droppings of water in the internal fissures of the rocks. Again, no whistling is ever allowed underground in Cornwall, and the German miners of the Hartz believed that whistling called up the *cobali*, evil demons. A few years ago, at the bottom of the Dolcoath Mine, in their deepest shaft, Professors Airey, Whewell, and Sedgwick, were desirous of trying some experiments with regard to the swing of the pendulum. After being engaged for some days in these operations to the great wonderment of the miners, their apparatus was packed up in an iron bucket, or *kibble*, with shavings, among which a spark from a miner's candle, must have fallen; for, when midway up the shaft, a flame burst forth; and the rope being burnt the *kibble* fell to the bottom, and the apparatus was very greatly injured. The miners declared that the fire was the work of the devil; and the next day there was a violent thunder-storm, and three miners were overheard saying they were quite sure it was owing to those men who had been underground; and one said, it must be the "little un" (Prof. Airey, our Philosopher Royal), because he *seed* him standing with his back against the churchyard. [This little anecdote elicited much laughter from the audience.] Another cause for this belief of the miners was the fact, that some of their instruments had been forwarded direct in cases from the establishment of Messrs. De Ville, in the Strand; and one of the miners read the direction upon the cases—"From the devil." (Renewed merriment.) On one occasion he (the lecturer) was trying some experiments by connecting with a galvanic wire the several portions of a lode divided by an elvan-course, when the miners, who had observed the deflection of his galvanometer on approaching copper, said—"The little thing knows the copper, but does not know the country;" and, when he wanted his apparatus conveyed from one part of the mine to another, they could scarcely be persuaded to touch it. (Laughter.) The following was one of the most graphic descriptions of the peculiarities of a mining country he had ever read. It appeared some years ago in the *Edinburgh Review*, and was from the pen of Capt. Head:—

"To one unaccustomed to a mining country, the view from Carn Marth, which is a rocky eminence of 757 ft., is full of novelty. Over a surface, neither mountainous nor flat, but diversified from sea to sea by a constant series of low, undulating hills and vales, the farmer and the miner seem to be occupying the country in something like the confusion of warfare. The situations of the Consolidated Mines, the United Mines, the Poldice Mine, &c., are marked out by spots a mile in length, by half-a-mile in breadth, covered with what are termed '*the deads*' of the mine—*i. e.*, slaty, poisonous rubbish, thrown up in rugged heaps, which, at a distance, give the place the appearance of an encampment of soldier's tents. This lifeless mass follows the course of the main lode (which, as has been said, generally runs east and west); and from it, in different directions, minor branches of the same barren rubbish diverge through the fertile country, like the streams of lava from a volcano—the miners being obliged to have a shaft for air at every 100 yards, and the Stannary laws allowing him freely to pursue his game; his hidden path is commonly to be traced by a series of heaps of '*deads*,' which rise up among the green fields and among the grazing cattle, like the workings of a mole. Steam-engines and *whims* (large capstans worked by two, or four, horses) are scattered about, and in the neighbourhood of the old, as well as of the new workings, are sprinkled, one by one, a number of small whitewashed miner's cottages, which, being neither on a road, nor near a road, wear, to the eye of the stranger, the appearance of having being dropped down, *à propos*, to nothing. Early in the morning the scene becomes animated. From the scattered cottages, as far as the eye can reach, men, women, and children, of all ages, begin to creep out; and it is curious to observe them all converging like bees towards the small hole at which they are to enter their mine. On their arrival, the women and children, whose duty it is to dress or clean the ore, repair to the rough sheds under which they work; while the men have stripped, and put on their *underground* clothes (which are coarse flannel dresses); one after another descend the several shafts of the mine, by perpendicular ladders, to their respective levels, or galleries. As soon as they have all disappeared, as most remarkable stillness prevails, scarcely a human being is to be seen. The tall chimneys of the steam-engines emit no smoke, and nothing is in motion but the great bobs, or levers, of their gigantic machines. As soon as the men come to *grass* they repair to the engine-house, where they generally leave their *underground clothes* to dry, wash themselves in the warm water of the engine pool, and put on their clothes, which are always exceedingly decent. By this time, the *maidens* and little boys have always washed their faces, and the whole party migrate across the fields in groups, and in different directions, to their respective homes—generally speaking, they now look so clean and fresh, and seem so happy, that one would scarcely fancy they had worked all day in darkness and confinement. The old men, however, tired with their work, and sick of the follies and vagaries of the outside and inside of this mining world, plod their way in sober silence, probably thiuking of their supper. The younger men proceed talking and laughing, and where the grass is good, they will sometimes stop and wrestle. The big boys generally advance by playing at leap-frog—little urchins run on before to gain time to stand upon their heads—while the *maidens* sometimes pleased, and sometimes offended at what happens, smile, or scream, as circumstances may require. As the different members of the group approach their respective cottages, their numbers, of course, diminish; and the individual who lives farthest from the mine, like the solitary surviver of a large family, perform the last few yards of his journey by himsel." [This narrative, which was several times interrupted by laughter, was loudly applauded by its conclusion.]

The ore was subjected sometimes to the process of "roasting," described in his last lecture, and always to that of "stamping." It was then divided into lots of a certain weight, and sold by ticket. These tickets described the mine, from whence it was bought, the condition of the produce, and other particulars. The introduction of the steam-engine had been a great advantage to the mining interests in Cornwall; and those advantages were probably greater than in any other district, in consequence of the "reporting system." An independent person was appointed to inspect them regularly; and the report being published, each engineer was anxious to make his engine look as well, in comparison with his neighbours, as possible; and, therefore, the engines were always kept in the most efficient condition.

The produce of copper had increased from 4000 tons, in 1777, to 160,000 tons in 1846. The imports and exports of copper were as follows:

	Import—Ore.	Import—Copper.	Export—Copper.
1842	50,080	418	9,703
1844	58,406	1,559	18,832
1845	56,679	194	18,039
1846	51,624	669	15,718

The number of people employed in the copper mines were—men, 18,472; women, 5764; and children, about the same. The woman and children were employed entirely above ground in work which was very easy; and they were generally a healthy and cleanly class of people.

The lecturer then referred to two immense masses of copper obtained from Lake Superior—for which he was indebted to the kindness of Mr. Tennant. The Lake Superior district was the most extraordinary for minerals in the world. The copper there found in such abundance, contained 95 or 97 per cent. of copper, which had evidently never been in any other condition, nor in the form of sulphuret. It had the disadvantage of being so excessively hard, that it had to be cut with a hammer and chisel. The South Australian copper mines were also very important.

The lecturer concluded by briefly describing the way in which copper was obtained in Anglesea and Ireland, by means of iron being placed in the water, filtrated through the hills, to which the copper adhered; and by stating that several other interesting particulars, which he was prevented now from mentioning by the expiration of his allotted time, would be alluded to in some of the following lectures.

[The next lecture, which will relate to "Iron," will be reported at length in the *Mining Journal*.]

Errata.—In our report of Mr. Hunt's lecture, in last week's Journal, the following typographical errata occurred:—Line 5, *custodia*, should be *custodier*; line 36, *cassiterianus* should be *Cassiterianus*; line 91, *at full tick*, should be *at full tide*; line 109, *cells*, should be *celts*; 2d column, line 23, *Westrell*, should be *Wastrell*; line 60, *principle*, should be *principal*; line 206, *lighted up*, should be *lifted up*.

EXCHANGE COMPANIES.

A defence of exchange companies, by the manager of one of these establishments in Glasgow, has excited considerable interest. It appears that they have been a very favourite kind of investment, as, at one time, eight exchange companies were commenced in Glasgow—afterwards reduced to six by amalgamation—which latter number were still in existence, although some of them are at the last stage of vitality. Besides these, Edinburgh, Aberdeen, and Dundee, have their companies. The "gold mists," out of which these cometary bodies sprung, were engendered by the following considerations:—"The rate of interest charged for advances was taken as the basis of a calculation. The paid-up capital put down—under it a sum of supposititious deposit money—the interest of the whole calculated—a proper allowance made for the expenses of management—the result fairly brought out—and such companies clearly proved to be capable of paying 20 per cent. per annum. There was the calculation—you might check it, or, if you were still incredulous, make ample allowance for exaggeration; and suppose the business yielded only 15 per cent., was that a return to be despised in these times? What would be the value of shares when the company paid annually 15 per cent.? Think over it, and you will be sure to put down your name for shares. If you suggested the propriety of making allowance for bad debts, you were told that, however proper in other concerns, it was wholly unnecessary in them. The funds were only to be advanced on security, and, therefore, nothing could be lost, as if some kind of security had been found that might, and probably would, increase in value, but could never decrease, and as if Glasgow was favoured with the presence of a number of individuals who might become very rich, but who could never, by any chance, become poor." The tricks of share traffic are sharply touched on:—"I cannot help referring (says the manager) to the case of men of wealth and high standing in the community, who were not ashamed to apply for shares in each company, as it was projected, for the sole purpose of selling them as soon as possible at a premium. These gentlemen were, in fact, selling, for a few weeks, the use of the good name they enjoyed with their fellow citizens for so much money—they were, in fact, holding out to the public that which was not the truth. The public, no doubt, thought they were right and safe in taking shares in any concern in which these prudent men of property intended to hold an interest—while, in fact, these men never did intend to hold any interest in it, or to care about its success at all. All they intended, was to take advantage of the existing mania for shares, and put money into their own pockets. It was painful to hear these gentlemen (!) narrate with self-satisfaction the profits of their successive operations, as if they expected praise for being clever enough to deceive their neighbours. The amount of talent required appears to me very much upon a par with that shown by a pirate when he hauls up his false colours." At present the practice of the company, managed by the author of the pamphlet, the *Glasgow Commercial Exchange*, is to borrow at 5½ per cent., and lend at 8, to the extent of four-fifths of the stock offered in security. This may or may not be safe data; but there can be little question of the very striking identification of proprietary interest in companies passing under different names, as exhibited in the case of nine exchange companies—the partners in all which are, except as regards three of them, identical.

COMBMARTIN SILVER MINES.

The parties interested in these mines have collected some curious information connected with the district in which they are situated, and from which we extract the following, as of general interest. The first is from the *Beauties of England and Wales*, vol. vi., p. 269:—

"Combe Martin (according to Westcott's manuscripts) dyriveth its name from the situation, beinge a lowe and deepe valley, surrounded with very high hills (towards the sea excepted), and the addition of Martin, from Le Seur Martyn de Turon, a manne of much worth, and assistant to William, Duke of Normandye, when he conquered this land."

Combmartin was formerly celebrated for its silver mines, or rather for the quantity of that metal extracted from the veins of galena, which run in numerous courses through the neighbouring hills. "Of the fyrst fyndinge and workinge the silver mynes, ther are no certaine records remaaynge. In the tyme of Edward I. they were wrought; but in the tumultous raigne of his sonne, they might chance to be forgotten, until his nephew, Edward III., who, in his Frenche conquest, made good use of them; and so dyd Henry V.; and lately, in our age, in the time of Q. Elizabeth, there was found a new lode in the land of Richard Roberts, gent., fyrst beganne to be wrought by Adrian Gilbert, Esq., and afterwards by Sir Bevis Bulmer, by whose mynerable skille, great quantitie of silver was landed and refyned, out of whiche he gave a riche and fayre cuppe to William, Earle of Barthe, whereon was engraven, if I rightly remember, this poesie:—

In Martyn's Combe long lay I hydd,
Obscured, deprest with grossest soyle,
Debased much with mixed lead,
Till Bulmer came; whose skylle and toyle,
Refined mee so pure and cleene,
As rycher no where els is seene,
And addinge yet a farder grace,
By fashion he dyd inable
Mee worthy for to take a place,
To serve at any prince's table.
Combe Martyn gave the use alone,
Bulmer, the fyning and fashion.

Anno nostræ salutis, 1593, *Reginæ Virginis*, 35, *Nobilissimo Viro Willielmo Comiti de Barthon, locum tenenti Devoniæ et Oxon.*

"And also another, with a cover, to Sir Richard Martyn, Knight, Lord Mayor of London, to contynue in the sayd citie for ever. It wayeth 137 ounces, fyne, better than sterling; on the which these verses may still be seene:—

"When water workes in broaken wharfes
At first erected were,
And Beavis Bulmer, with his arte,
The waters 'gan to reare;
Dispearsed I in earthe dyd lye,
Since alle beginninge olde,
In place called Combe, wher Martyn longe
Had hydd mee in his molde.
I dydd no service on the earthe,
And no manne set mee free,
Till Bulmer, by his skille and change,
Did frame mee this to bee.

Anno nostræ Redemptionis, 1593, *Reginæ Virginis*, 35, *Richardo Martino Militi, iterum Majori sive vice secunda civitatis London.*

The second extract is from a very old volume, entitled *Admirable Curiosities, Rarities, and Wonders, in England, Scotland, Ireland.* The inscription upon the silver cup, said to have been presented by Bulmer to the Earl of Bath, will be observed to correspond very closely; and we think there can be no reasonable doubt of the authenticity of the narratives.—"Devonshire hath the narrow Sea South, the Severn N., Cornwall W., Dorset and Somerset E. The natives are ingenious in any employment; and Q. Eliz. used to say of their Gentry, they were all born Courtiers with a becoming confidence. There was plenty of Silver formerly found in the Parish of Comb Martin, and King Edward I. fetched Miners out of Derbyshire to dig it, turning to great profit, as appears by a Record in the Tower of London. For Will. Wymondham accounted for 270 pounds weight of Silver, and he was fined 291 pounds 10 shillings weight. In his 24th year was brought to London in fined Silver in Wedges 704 pounds 3 shilling penny weight of silver; next year 360 Miners were pressed out of the Peak and Wales to dig it, and great was the profit in Silver and Lead. In the reign of Edward III. the Silver was considerable towards the Maintenance of the Wars. These mines being neglected by the Wars of Lancaster and York were again re-entered by one Bulmer, an Artist, in Queen Elizabeth's time, who presented a Silver Cup made thereof to the Earl of Bath, with this inscription alluding to the Metal—

"In Martin Comb I long lay hid
Obscure, deprest with grossest Soil,
Debased much with mixed Lead,
Till Bulmer came, whose skill and Toil
Reformed me so pure and clean,
As richer no where else is seen.

For the following valuable document respecting the above mines, we are indebted to the kindness of Charles Webber, Esq., of Buckland House, near Braunton, whose family have carefully preserved the original very many years:—CHARLES R.—"Trusty and Welbeloued—We greet yu well—We haue Receiued a faire Character of your Affections to our Welbeloued Servant Thomas Bushell Esq. and of your seruiceable Endeauors for aduancing his further discouery of the Mynes att Cummartin in order to the publiqz Good, and hauing had a sight of the Oure, which we conceiue lyes there in vast proportions according to the testimony of Antient Records in that behalfe. We haue thought fitt, not only, to let you know that We shall esteem it an acceptable Service if by pursuance of your first principles you add to his encouragemts but alsoe by any Act of Grace that may reward you on your posterity readily make good the same—Soe not doubting your Chearful Compliance with him in all things tending to the advancement of soe good a Worke, We bid you farewell—Given under our Sign Manuell at Our Court at Newport in ye Isle of Wight this 26th day of October in ye 24th Year of Our Reigne 1648.

"To our Trusty and Welbeloued
subject Lewis Inciedon of Branton
in our County of Devon Esq."

MINING IN TURKEY.—A letter, from a correspondent, dated Constantinople Dec. 22, says—"I am positively assured that the Turks are going to set about working their innumerable and valuable mines, by companies, into which Europeans will be admitted. Their emery mines have already been sold to Franks; and, on account of the great competition, large sums have been paid to the Treasury for them. Among others, the manganese mine was sold to an English house for the enormous annual sum of 12,000*l.*! It has, further, been decided on forming a company to work a copper mine, some time back discovered at Katirlia, in the Gulf of Ismet, and supposed to be very rich; but only think of the company being organised at 250 shares, of 20*l.* each, or in all 5000*l.* for the whole capital. It is pretty evident they have much to learn on such matters; but their going to work on so small a scale is a proof that a moderate amount would, under proper direction, go a great way in this country.'

ROBBERY OF TIN AT WHEAL VOR.—Elisha Palmountain, tin dresser, at Wheal Vor, was detected stealing tin, on Thursday last, from the mine. He had been employed there for a number of years, and the adventurers placed great confidence in him. On Saturday last, Palmountain was committed to await his trial at the next assizes.—*Penzance Journal.*

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending Jan. 8, was 16,762; amount of money, £69 16s. 10d.

Mining Correspondence.

ENGLISH MINES.

BARRISTOWN.—The lode in the 18 fm. level end west is still divided into small branches, producing stones of ore; the part standing north of the end looks rather better than the part we have driven the end on. The stopes, in the back of the 10 fm. level, behind this end, are worth about 6*l.* per fm.; the stopes also in the back, over Doyle's, are improved, worth, at present, 20*l.* per fm. In the 12 fm. level end west the lode is large, but very irregular, producing stones of ore; the small branch of lead in the winze, east of flat-rod shaft, is rather improved, about 2 to 3 in. wide; the winze, sinking in the bottom of the 12 fm. level, on the middle lode, is worth about 8*l.* per fm.; the stopes, in the back of the 12 fm. level, on the middle lode, look much the same as last reported, worth about 6*l.* per fm.; the lode in the adit end east is producing stones of lead through the blende and gossan, which is about 3 ft. in width.—Jan. 7.

BEDFORD UNITED.—At Wheal Marquis, the lode in the 90 fm. level west is 2½ ft. wide, and will yield about 3 tons of ore per fm.—ground a little hard; in this level east, we are still driving to cut the lode. In the 90 fm. level cross-cut, south of Hooper's winze, we have cut a lode about 18 in. wide, but continue to drive south, to prove if it is the main south lode: this lode is producing good stones of ore. There is no alteration in the 80 fm. level east, since last report. There has been no lode taken down in the 70 fm. level; in this level west, on the south lode, we are desuing the lode. The pitches are yielding good returns. The lode in the 25 fm. level, east of the south engine-shaft, is 2 ft. wide, producing good stones of ore. In the adit level east, there has been no lode taken down.—Jan. 12.

CALLINGTON.—The lode in the 25, west from Kelly Bray, is from 4 to 5 ft. big, composed of peach, jack, and mundic, with copper ores, very promising. The winze below the 40 fm. level, at the north mine, on the cross-course, is holed to the 50, giving ventilation to both these levels; in the latter, we have driven 16 fms. on the east side of the cross-course, and expect to cut the lode in the latter part of this, or early next week. In the 70 east, the lode is 3 ft. wide, of the same composition, intermixed with copper ores; in the rise, the lode is 2½ ft. big, and will produce 2½ tons of copper ores per fm.; the ground is rather hard. In the 90, the ground is favourable for driving. The lead lode shows nothing new in this part of the mine. In the 125 south, at the south mine, the lode is a little improved, and the back, from present appearances, will work at a moderate tribute. No lode taken down in the north end. In the 112 north, the lode is 10 in. big, work of a fair quality. In the south end we are opening tribute ground; the same remark may be made for the north. In the 90, we have a very promising lode, and expect just now to be opening ground that will work at a low figure. In the 80 north, the lode is producing silver-lead ores. We have about 50 tons of copper ores, which will be ready for sampling in a day or two.—Jan. 10.

COATLITHE HILLS.—In consequence of so much of the productive ground east from A shaft having been taken away, I have thought it advisable to put the men to sink into a productive hazle, which is about 2 fms. deeper than the bottom of our level; and, from the appearance of the vein in the plate (unproductive strata), I have every reason to expect that in a short time we shall cut something well worthy of notice.—Jan. 8.

COMBLAWN.—The ground in the engine-shaft, as well as in other parts of the mine, where we have explored, has been a dark blue killas, intermixed with branches of silver-lead ore, dropping towards the lodes, particularly in the engine-shaft—this clearly indicates that we are in a rich mineral country, as also from the nature of the two lodes that has been intersected in the engine-shaft. The change of ground that have recently taken place in the shaft—viz.: the elvan course—has been found to be congenial for lead ore in this district (see Callington Mines). From these indications, I do confidently expect that when we cut the lode in the 20 fathom level, our prospects will be such as will warrant an extensive trial, and ultimately be productive of profitable results—in fact, I may say so with propriety, from what we have already seen of the lode at the south mine. Our men are working with spirit, and, at this present time, we are getting on well with the sinking of the engine-shaft. At the north mine, we have been engaged in driving east of sink, on the south lode, in this mine, 4 fms. below the surface; it is 4 ft. wide, composed principally of gossan, prian, and soft spar, with patches of silver-lead ore throughout. From what I have seen of these lodes above the adit level, and from information that I have collected relative to the former working, I believe the ore is of such a character as will ultimately be productive, if fully developed. The quality of the ore from these lodes is well known, and will compete with any other in this district; and I consider them to be of sufficient promise to warrant a reasonable outlay.—Jan. 11.

CUBERT SILVER-LEAD.—The sumpmen, in driving south in the 35 fm. level, 9 feet from the lode driven on before, cut yesterday a very promising lode indeed; it is 18 or 20 in. wide, composed of very soft white spar, mundic, and fine large stones of lead, worth at least from 8*l.* to 10*l.* per fm.; this, of course, is a very important discovery, and shall be able to say more about it shortly; going east, in this level, the lode is 10 in. wide—spar, mundic, and lead, worth 3*l.* per fm. In the 25 fm. level west, the lode is 1 ft. wide—worth 5*l.* per fm. In the end in the 15 fm. level west, the lode is 20 in. wide, yielding some good saving work—worth from 2*l.* to 3*l.* per fm. Nothing new in the tribute department.—January 7.

DEVON AND COURTENAY CONSOLS.—The lode in the winze, sinking in the bottom of the deep adit level, is 18 in. wide, 10 in. of which, in the eastern end, is good work for lead; the other part of the lode is composed of spar and mundic. In our cross-cut, driving north from the engine-shaft, we have intersected a branch 6 in. wide, underlaying towards the lode, containing some good stones of ore; the ground in the cross-cut continues favourable for driving. The shaftmen will have completed most of the work necessary to be done (previous to our commencing sinking our engine-shaft) by the end of this week.—Jan. 11.

DEAN PRIOR AND BUCKFASTLEIGH.—The engine-shaft is sunk 7 fms. below the 20, or bottom level. The strata is chiefly killas, and small branches of spar, mixed with iron, and some spots of yellow ore; in the 20 fm. level, driving west, we have laid open the lode 2 ft. 6 in. wide, being of a very promising character, composed of capel, spar, and prian; the lode appears to be very large; we have not as yet discovered the north wall; the lode in the pitch, back of this level, is about 4 ft. wide, and producing some good work. The men are working with spirit, and, form the present indications, expect to be fairly remunerated for their labour. We shall commence removing the drum in the course of two or three days, in order to refix the same, to connect with the 24-ft. water-wheel, for drawing the attle and water from underground; while at the same time we shall carry out the underground operations, and particularly so, in sinking the engine-shaft, to get down to the intended depth with all possible speed. Having so nearly completed the drawing-machine, we shall immediately after attend to fixing the crusher, and no time shall be lost as to carrying it into effect, in order to prepare the ores for the market.

EAST CROWNDALE.—The ground in our engine-shaft is at present favourable for sinking—it is a blue killas, with small branches of spar, containing copper ore; we have sunk the past week 5 ft. 6 in. The 47 fm. level, driving east, on the north lode, is poor—the lode about 1 ft. wide, composed of flookan, spar, mundic, and spots of copper ore; the lode, in the western end of the 47 fm. level, is very much improved in the past week, and is getting into a settled state, with two regular walls, and is about 15 in. wide, composed of spar, peach, capel, and good stones of copper ore; from the present appearance of this level, I confidently expect we are near a bunch of ore. I am sorry to state, that we have not been able to resume working on the engine-shaft, at Rix Hill, there being still a great influx of water through the old men's workings. The men are busily engaged in bringing up a drain, so as to cut off all surface water; should the weather prove favourable, we shall resume sinking in the beginning of next week. In the winze, sinking below the adit level, at Rix Hill, on the south lode, there is so much water, that it is stopped for the present, and the men put to stope a piece of good tin ground to the east of Harris's shaft. Our engine and pitwork all in good order.—Jan. 8.

GALLOWAY.—The lode in the shaft, which we are sinking here, continues large, composed of spar, prian, gossan, and flookan, but getting harder as we proceed.—January 3.

GREAT MICHELL CONSOLS.—The lode in the sump winze continues 6 ft. wide, containing mundic, spar, and ore, producing some saving work. In the 35 fm. level, west of the sump winze, the lode for the whole width of the end is composed of mundic and spar, with a little ore, intermixed throughout

HOLMBUSH.—The ground in the 132 fm. level, south from the diagonal shaft, is still favourable for driving, but no branch has been intersected since last reported. The lode in the 120 fm. level, west of the slide, is 12 in. wide, producing stones of ore; the tribute pitch, in the back of this level (east of the great cross-course), is producing a fair quantity of copper ore, and the men getting wages. We are still driving east from the 110 fm. level, to prove if there be another part in that direction; there is a great deal of water proceeding from the end, and we think we are not far from a branch. The lode in the 100 fm. level south is 3½ ft. wide, composed of quartz, and stones of rich lead ores, with favourable ground for driving; one of the tribute pitches in the back of this level is improved since our last report; the other pitches in the back of this level, as well as those in the back of the 110 fm. level, are producing a fair quantity of lead ore.—Jan. 11.

KIRKCUDBRIGHTSHIRE.—The lode in the 50 fm. end west is 3½ ft. wide, producing stones of lead. The lode in the 40 fm. end is 4 feet wide, yielding ¾ ton per fm. The lode in the 30 fm. end west is large (say 4½ ft. wide), yielding ¼ ton of lead per fm. The lode in the winze, under the 40, looks much the same as last reported, producing about 1 ton of lead per fm. The lode in Keith's shaft is 3½ ft. to 4 ft. wide, with a branch of lead, say ½ ton per fm.—Jan. 8.

LEWIS.—The lode in the engine-shaft, sinking below the 60 fm. level, is 2 ft. wide, producing a small portion of tin, and very promising. The lode in the 60 east is 3½ ft. wide, worth 4*l.* 10s. per fm.; the lode in the 60 end east, on south branch, is 1 ft. wide, worth 12*l.* per fm.; the lode in the 60 end west, on south branch, is 15 in. wide, worth 13*l.* per fm. The lode in the 50 east, on south branch, is 10 in. wide, worth 7*l.* per fm. The lode in the 40 east, on south branch, is 6 in. wide, worth 3*l.* 10s. per fm., opening ground that will work at 10s. tribute. We have now at work 25 pitches, at an average tribute of 7s. 6d.—January 8.

MENDIP HILLS.—The lode in the 38 fm. level, south of Stainsby's shaft, is greatly increased in size during the past week—how wide it is I cannot at present inform you, as we are extending the end on the foot wall; from its appearance I think we are approaching the junction of another lode. In the slag department we continue to get on as fast as possible with the tram-road, &c.; I hope to see it completed by Wednesday evening next; in the open cutting across the upper part of the valley we are still laying open some very good slags.—Jan. 10.

SOUTH WHEAL TRELAWNEY.—The ground in the engine-shaft is very favourable indeed for sinking—being a light blue killas strata, in which spots of lead, copper, and mundic, are often seen; such indications as these are so far pleasing, and kindly to see a mineralised strata not far from the lode. The shaft is being sunk by nine men, per contract, until they reach the 30 fm. level; it is now in the 22 fm. level, below the adit level. Every effort is being made by them to complete their bargain—commencing their work on Mondays at 1 o'clock A.M., and leaving it on Saturdays at 10 o'clock P.M.; the engine continues to work well, and everything is in regular order; the water we have to draw is about two strokes per minute to keep it in fork.

STRAY PARK AND CAMBORNE VEAN.—We beg to hand you the following report on the tutwork operations in these mines:—In the rise, above the back of the 60 fm. level, the lode is 1 ft. wide, yielding 15 ton of ore to a fm.; in the 60 end, driving west, the lode is 1 ft. wide, yielding 1½ ton of ore to a fm. In the 70 end, driving west, the lode is small and poor. In the 80 end, driving west, the lode is 18 in. wide, yielding 2 tons of ore to a fm. In the 90 end, driving west, the lode is 3½ ft. wide, yielding 4 tons of ore to a fm.; in the winze, sinking below the 90 fm. level, the lode is 3 ft. wide, yielding 4 tons of ore to a fm. In the 100 end, driving west, the lode is 2 ft. wide, yielding 1 ton of ore to a fm.; in the rise, above the back of the 100 fm. level, the lode is 2 ft. wide, yielding 3 tons of ore to a fm. In the 110 end, driving west, the lode is 2 ft. wide, yielding 2 tons of ore to a fm. In the 120 end, driving west, the lode is 2 ft. wide, yielding 3 tons of ore to a fm. In the 130 end, driving west, the lode is small, containing stones of ore. In the 150 end, driving west, the lode is 2½ ft. wide, yielding 2 tons of ore to a fm.; in the 150 cross-cut the ground is still favourable—price 6*l.* per fm. In the 180, driving east, the lode is 1 ft. wide, containing stones of ore; in the 180 end, driving west, the lode is 3 ft. wide, yielding 2 tons of ore to a fm. In Wheal Francis cross-cut, driving south in the 56 fm. level, we have driven 7½ fms. during the last month, and within three months from this time we expect to intersect the south lode. Our next sampling will exceed 500 tons, and the tribute ground is looking very well.—Jan. 10.

TAMAR SILVER-LEAD.—The lode in the engine-shaft is 2 ft. wide, composed of capel, mundic, and ore, but not rich for the latter. In the 160 end south the lode is 1 ft. wide, poor at present; in the same level north no lode has been taken down since last report. In the 145 end south, the lode is 3 ft. wide, producing work of a coarse quality. In the 135 end, the lode is 2½ ft. wide, composed of can, mundic, and ore, of rich quality. The 115 end is in slidy ground, and unproductive. At the north mine we have holed the rise from the 70 to the 60 fm. level; the lode in the 70 end is 2 ft. wide, composed of can, capel, and ore—saving work. In the winze, sinking on the eastern lode, the lode is 2 ft. wide, good work for silver-lead ore. We sampled on the 1st inst. computed 90 tons of silver-lead ore.—Jan. 10.

TRELEIGH CONSOLS.—Christoe's shaft, below the 110 fm. level, is sinking in the country; in the 110, east of Christoe's, the lode is 2 ft. wide, producing stones of ore. In Garden's shaft, below the 100 fm. level, the lode is 3 ft. wide, producing good stones of ore; we are fixing a lift in the 100; in the 100, west of ditto, the lode is about is about 3 ft. wide, with stones of ore, not to value; in the 100, east of ditto, the lode is 1 ft. wide, with occasional stones of ore. In the 90, west of ditto, the lode is 2 ft. wide, worth 8*l.* per fm.; in the winze, below the 90 west, the lode is 3 ft. wide, worth 15*l.* per fm. In the 80, west of ditto, the lode is 2½ ft. wide, worth 3*l.* per fm., and has a very promising appearance. In the rise above the 70 west the lode is 18 in. wide, but little mineral. In the 60, west of ditto, the lode is 2 ft. wide, much improved in appearance, with stones of ore. Wheal Parent cross-cut north is cross-cutting to the new shaft.—Jan. 8.

WEST WHEAL JEWEL.—No lode taken down in the past week either on Wheal Jewel lode, or south lode. We are cross-cutting in the 30 fm. level, west of Quarry shaft, in search of more lode. In the 20 fm. level, west of Quarry shaft, we have intersected Hodge's cross-course in the past week; in the deep adit end, west of Quarry shaft, on Tolcarne tin lode, the lode is 1 ft. wide, worth 6*l.* per fm.; in the shallow adit end, west of Quarry shaft, on the same lode, the lode is 18 in. wide, unproductive; in the stopes, in the bottom of the adit, east of Pryor's winze, on the same lode, the lode is 6 ft. wide, worth 40*l.* per fm. In the stopes, in the back of the 12 fm. level, west of Pryor's winze, the lode is 5 ft. wide, worth 35*l.* per fm.; in the stopes, in the bottom of the 12 fm. level, east of George's winze, on the same lode, the lode is 3 ft. wide, worth 7*l.* per fm.—Jan. 10.

WEST WHEAL MARIA.—The ground in the cross-cut south, in the 54 fm. level, is rather hard for driving, in which I think we are not far from a lode, or branch, as there is pretty much water issuing out of this end.—Jan. 11.

WHEAL ADAMS.—In extending the 50 fm. level south-east, we have intersected a lode, which is about 2 ft. wide, consisting of friable quartz, containing a small portion of granular galena—it resembles the quartzose lode; but as there is no water issuing from it, we are not satisfied that it is, and have, therefore, continued driving the ends—the ground in which is favourable. We expect to reach the flookan this week—to the east of which no lode has been found to exist. About 5 fms. above the 18 fm. level, we have extended a cross-cut west in decomposing porphyry, for the purpose of intersecting the middle branches and western silver-lead lode; this can be done at a trifling expense, and it is more than probable that ground will soon be laid open to work at a moderate tribute. The tribute pitches are improved, and most of the tributers are earning wages. We shipped, at Teignmouth, yesterday, in the *Richard of Exeter*, the gossan, mundic, and lead ores for Llanelly—in all, 95 tons, dry; and we hope to procure another vessel, in the course of a few days, to take the 30 tons of lead ores, purchased by Messrs. R. Mitchell and Son, of Truro, on Friday last.—Jan. 12.

WHEAL SOPHIA.—Boundy's shaft is now at the depth of the adit level; and the cross-cut from which level is within four fathoms of the shaft. We have suspended the shaft, owing to so much water; and have put more hands to drive the cross-cut. In a short time, we expect to hole to the shaft, ventilate the mine, and be able to work on the course of the lode in sinking or driving. The last 10 feet we sunk in the shaft we went through a strong capel, with mundic and veins of copper ore, running near the north and dipping west, and will intersect the lode we have driven upon in the adit level, about 10 fathoms further west; and, from appearances, we may expect that junction to be favourable.—Jan.

WHEAL TRELAWNEY.—Phillips's shaft is still sinking satisfactorily The lode in the 52 south is not so good as when last reported, and is worth at present 10*l.* per fm.; this level north is worth 7*l.* per fm.; the stopes in the back are looking very well, particularly to the north of the shaft. The lode in the 42 north is worth 10*l.* per fm., where the ground is favourable for driving; and, if it continues, we hope to hole this level to Trelawney 42 cross-cut west, in the course of next week, when we shall relieve Phillips's engine considerably, by turning the water to Trelawney's shaft in that level; the backs here are not altogether so productive as they have been. The lode in the 32 north, and stopes in the back, are not much altered since my last report. We hope to complete fixing the lift, putting down the rods, &c., in Trelawney's shaft this week. The ground in the 42 cross-cut west is much eased, but in the 22 cross-cut east, it is still hard. At Vivian's, we are getting on with all possible speed, and hope, by the end of this week, to be in course to drive the end north in the 30 fm. level.—Jan. 11.

FOREIGN MINES.

ST. JOHN DEL REY MINES.—The gross amount of produce at Morro Velho, for the six months ending 31st August last, has been as follows:—March, 4807*l.*; April, 4956*l.*; May, 5100*l.*; June, 5210*l.*; July, 5585*l.*; August, 5762*l.*=31,420*l.*—Expenditure for the said six months, 19,242*l.*; duty (5 per cent. at the mine, 2 per cent. on exportation), 2199*l.*=21,441*l.*—net profit at Morro Velho, 9979*l.* The following is a statement of the company's finances: Cash at the bankers', 916*l.*; railway debentures, 6400*l.*; gold in Brazil, for August, 5360*l.*=12,676*l.*—deduct, drafts running from Brazil, 4860*l.*, leaves 7816*l.* The directors have declared the eleventh half-yearly dividend of 10s. per share, which will take 5500*l.*

COLLIERY ON FIRE.—Mostyn Colliery, near Holywell, took fire yesterday week, and is still burning. It is not, we believe, exactly known how it originated, but it is supposed to have been from two men at work in the Durboy seam taking off the tops of their lamps, and thus igniting some gas which rises from the yard seam 4 ft. below, without any explosion. The stoppings were made up before they left on the Friday, and on Sunday morning they very imprudently took them down, without proper examination; the consequence was, the rush of fresh air resuscitated the fire, and it continued yesterday burning as fierce as ever.

REDUCTION OF MINERS' WAGES.—We regret to learn, by the *Birmingham Advertiser*, that, on Saturday last, the miners in the employ of Messrs. Lloyd, Foster, and Co., Wednesbury, received notice for a reduction of their wages, of 1s. per day, to commence after the 22d of January inst.

MINING COMPANY OF IRELAND.

In last week's Journal we briefly reported the proceedings at the half-yearly meeting of shareholders, held in Dublin, on the 6th inst., at which the following report was presented—(some observations referring thereto will be found in another column):—

REPORT.

The unfavourable circumstances adverted to in your board's last report, and that preceding it, continuing in operation, the company's profits have been still further reduced in the half-year now ended. Your gross profit is estimated at 2210*l.* 6s. 7d., from which sum there has been expended in fitting the new colliery at Earl's Hill, and extending the works at Knockmahon, with some improvements at Luganure and Ballycorus works, 1676*l.* 15s. 3d.—leaving a net available surplus amounting to 523*l.* 18s. 4d. only towards interest upon the company's capital, of which surplus there has been expended in driving the level to Lisnacon Colliery, 140*l.* 5s. 5d.

THE KNOCKMAHON COPPER MINES, COUNTY WATERFORD.—The amount of expenditure at the Knockmahon Mines in the half-year is 10,679*l.* 1s. 3d.; the quantity of ore obtained 2093 tons, and the net produce thereof, less charges, 10,530*l.* 9s. 1d. The charges include rent, 984*l.* 1s. 8d.; poor rate, 111*l.* 6s. 6d.; and costs attending the supply of provided food for labourers, which latter account is now finally closed. Having on a former occasion reported fully the state of these mines, and no important alteration having since then occurred therein, your board has only to state that in several parts of the mines the present prospects are considered to be encouraging; and that there is now some expectation of an early adjustment of the long pending question regarding rent, and of amendment of the enactment which occasioned the difficulty under which the company, as well as many proprietors of mines, and the labouring class, have suffered. The means by which this amendment can be effected upon a general principle advantageous to the country at large is under the consideration of Government, with the concurrence of parties immediately interested, in the form of a bill to amend the defective state of the law as regards rents and rating, for the poor of mines in Ireland. In the expectation of a satisfactory arrangement of this question, the searches in the deep levels in the mines, as well as at and near the surface, have been continued without intermission, which has involved expenditure amounting to 757*l.* 3s. 7d. in the half-year, exclusive of the ordinary outlay in working the mines.

THE SLIEVARDAGH COLLIERIES, COUNTY TIPPERARY.—The demand for small coal at the Slievardagh Collieries has become more extensive, but is still insufficient to afford to the men employed more than from two to three days hire weekly, without increasing the already very large stock exceeding 50,000 tons on bank; and your profits, which amount, in the gross, to 2545*l.* 5s. 4d., are proportionately limited, having been further reduced by the requisite expenditure of 719*l.* 1s. 8d. in fitting the new colliery, Earl's hill—from whence, however, an abundant supply of large coal, of superior quality, for which there is a good demand, will be obtainable early in this year, which will, it is expected, add considerably to the company's income from the coal district; and it is also expected that the sale of small coal will become more extensive within the period of the ensuing account, which alone is requisite to render your collieries in this district one of the most important and productive sources of profitable employment in Ireland, the scale upon which these collieries have been opened admitting of full employment for the entire of the unemployed labourers in the barony.

LISNACON COLLIERY, COUNTY CORK.—The level to unwater Lisnacon Colliery has been extended 1058 yards, including open cast; and the entire length by survey, being 1500 yards, there remain to be driven 442 yards to the coal.

LUGANURE LEAD MINES, COUNTY WICKLOW.—At Luganure Lead Mines, the bearing ground having ceased to yield profitable returns, additional searches have been made at various points within this extensive royalty, which occasioned an outlay to the extent of 50*l.* per month, in the past half-year, above the value of the produce obtained from the mine. Of those searches, one consisting of an opening at the surface on the course of the old Luganure Mine, is considered to afford good prospect of a valuable discovery.

BALLYCORUS LEAD WORKS, COUNTY DUBLIN.—The company has been deprived of the customary profit from the smelting establishment in the past half-year, it having become necessary to renew the horizontal flues created 15 years since, which had become inoperative by the continuous action of the fires during that period, and pending those repairs, now completed, the furnaces could not be worked. The limited scale of operations arising from this cause, and the unproductiveness of the lead mines, together with a reduction of 1*l.* in the price of lead, the present stock being calculated at the reduced rate, have occasioned the non-continuance of the satisfactory scale of profit in the previous half-year from those works. No progress has been made during the past half-year towards obtaining the expected decree for the sale of Lord Audley's estate, but the company's annuities charged thereon have been regularly paid by the receiver under the Court of Chancery. A summary of the audited abstract of accounts presented herewith, shows the assets of the company to consist of—Mineral produce, 28,496*l.* 3s. 10d.; cash, bills, good debts, and mining materials not in use, 24,385*l.* 19s. 3d.; mines, farms, and mill sites, 139,925*l.* 7s. 4d: in all, 192,807*l.* 10s. 5d.—loss the company's liabilities, 10,663*l.* 3s. 9d.; making the net assets of the company, 182,144*l.* 6s. 8d. Referring to the abstract of the accounts, and taking into consideration the continued absence of sufficient demand for small coal, of which a considerable part of the mineral stock consists, together with the low prices obtainable for copper and lead, and the increased value of money, your board having applied nearly 2000*l.* in lessening the company's liabilities, and disbursed a similar sum in improvements during the half-year, cannot recommend a dividend on the present occasion; but from the prospect of improvement in the company's position, confident expectations are entertained that a more favourable and satisfactory report may be presented in the ensuing half-year, for within that period the new colliery at Earl's hill will be in a productive state; and there is only reason for expecting that the obstacles which have for some time deprived the company of return for the liberal expenditure of capital at the Knockmahon Mines will be removed in the current year, which would, irrespective of your other investments in lead mines and smelting works, admit of ample interest for the capital embarked in the concern; and awaiting those results every practicable reduction of expense, consistent with efficient management, has been effected in every department of the establishment under the direction of your board.

GREAT WHEAL MARTHA MINING COMPANY.—A special general meeting of shareholders was held at Winchester House, Old Broad-street, on Tuesday, the 11th inst.—GEORGE THOMAS, Esq., in the chair.—The notice convening the meeting having been read, and also the minutes of the previous meeting, the following resolution was passed unanimously:—"That this company be dissolved, and that the committee have full power to take such steps for selling the mine, engine, machinery, and all other effects of this association, or otherwise disposing of the same in such manner, for such price or prices, and upon such terms as they may think proper and expedient, by public sale or private contract; and that a special general meeting of the shareholders be held at this place on Friday, the 28th day of January instant, at 12 o'clock at noon, to confirm this resolution." Thanks having been voted to the chairman, the meeting adjourned.—[After the business of the meeting had terminated, a conversation took place amongst the shareholders present, who intimated, without an exception, their continued good opinion of the mine, and their willingness to subscribe to a new company, if they hereafter had an opportunity to do so.]

GREAT WHEAL FREDERICK, LINKINGHORNE.—A general meeting of shareholders was held at the Queen's Head, Tavistock, on Saturday, the 18th Dec.—FREDERICK ST. THOMAS, Esq., in the chair.—It was reported, that it had become necessary to erect machinery for the further prosecution of the mine; that it was the opinion of Capt. Spargo, and other agents, that a sum of 700*l.* or 800*l.*, judiciously expended in machinery and other operations, would put the mine in full work, and in a position to return ample dividends; that the purser's accounts (which were then exhibited and passed) showed a balance in his favour of 468*l.* 2s., and that the liabilities were about 20*l.*—It was observed and proposed by Mr. THOMAS, that the present position and features of the mine were highly encouraging, and that it was desirable that the mine be immediately put full operation. That, to effect this object, he was willing to forego the payment of the sum of 468*l.* due to him, as purser of the mine; and that he was also willing to give, in lieu of any present call upon the shares held by him, 500 shares in the mine—the same to be sold at 2*l.* per share, and the proceeds to be paid into Messrs. Gill and Rundle, the bankers of the mine, as the funds of the company, to be applied to working the mine; but that such offer be contingent upon the other shareholders consenting to a call of 10s. per share upon their respective shares. It was, therefore, resolved, that the offer of Mr. Thomas be accepted; that the 500 shares be advertised for sale, at 2*l.* per share, the amount thereof to be paid into the bankers of the mine; and that a call of 10s. per share be made upon all the other adventurers—to be paid within 21 days, according to the rules and regulations.

SOUTH WHEAL FRANCIS.—At the two-monthly meeting, held on the 3d inst., the accounts were examined and passed, showing labour cost for October and November, 2042*l.* 10s. 2d.; on account of engine, 600*l.*; pitwork and timber, 400*l.*=3042*l.* 10s. 2d.—By copper and tin ores sold, less dues, 3606*l.* 15s. 3d.—leaving profit of 564*l.* 5s. 1d.; to which add balance in Sept., 688*l.* 9s. 2d.=1252*l.* 14s. 3d.; from which deduct dividend of 8*l.* share, leaves balance in hand, 260*l.* 14s. 3d.—The following report was read:—"I never saw the mine look so well. I expect they will charge up all the balance for the engine (580*l.*) at next account, give a 10*l.* dividend, and increase the balance considerably. The new shaft is much below the 50 fm. level. The engine, although wanted, will not be of much use for six months, or till the shaft is down to the 80 or 90 fm. level. The old engine is very much pressed."

TRENANCE.—We regret to hear that any difference should exist between the parties connected with this adventure; but, from papers placed before us, such appears to be the case. We would suggest that some amicable arrangement be arrived at, so as to render it unnecessary for us to enter into matters, which, while, in one sense, they may be considered of an individual character, yet involve a public principle.

NEW COPPER-WORKS AT PENCLAWDD.—Amongst the various other indications of the increasing commercial importance of this district, arising from the development of its resources, and the enterprise of capitalists, we have to announce, that Messrs. Hunt, Lowe, and Co., have completed arrangements for carrying on a copper smelting establishment at Penclawdd. It is to be under the management of Mr. Evan John.—*Swansea Herald.*

ANCHORS.—Two anchors, respectively of 20 and 21 cwts., on the plan of Mr. Miller, superintending engineer of Devonport Dockyard, were tested to-day in the testing-house at Portsmouth, and failed to sustain the usual proof tests which anchors of that weight are subjected to before they can be considered fit and trustworthy for service. It is much to be regretted that all such experiments as the above are not superintended by a qualified committee to report upon the eligibility or noneligibility of all such improvements, as we fear that many valuable suggestions are lost to the service for want of a better system than at present worked upon in these and other such important matters connected with the service; thus, the anchor has remained for centuries unimproved in principle, whilst everything else around has been benefitted by scientific skill and individual enterprise.

CARWINNING HILL MINE.

SIR,—On seeing a report in your Journal of a copper mine at Carwinning Hill, in the parish of Dalry, Ayrshire, I went to look at it—more from curiosity than from any other motive; and, having seen it, think it my duty to caution you against allowing statements like those of the 25th December and 1st January to appear, without having previously ascertained their true value. The statements referred to are so far from fact, that taking them, coupled with your notice of same date, of the Carwinning Hill Mine shares being at a premium, one is led to infer, that they are inserted for a purpose, and that not the most honourable. The facts regarding the said mine are as follow:—At Carwinning Hill there is found a small quantity of grey copper ore, of rich quality, very sparingly interspersed in the fractures and dislocations of the carboniferous limestone, and shales and chert connected with it—the shales being mostly indurated by trap, of which the hill is, in a great measure, composed. There is as yet no regular vein seen, either of ore or gossan; and as for the mining operations, 20*l.* sterling would pay for all that has yet been done. There are two mines commenced, one about 10 feet above the other. The upper one is driven about two fathoms, and the lower about six fathoms, into the hill; and they are connected by a hole, for the purpose, apparently, of giving the lower one air. This hole, I suppose, is the shaft referred to in the notice of the 25th December, as being sunk on a lode of argentiferous copper ore. It is useless to particularise any portion of the descriptions, they are a tissue of exaggerations and blarney such as I have seldom read; however, I will notice one point, of which any one conversant with the subject can judge. It is said in the statement of the 1st January, that the hill is of clay-slate, or killas, similar to the clay-slate in which the celebrated Parys and Mona Mines were discovered. It is nothing of the kind; nor is there any clay-slate nearer to the hill than 25 miles. In fact, looking at any geological map of the west of Scotland, you will see that there is not a primary nor transition rock in the district. The only stratified portion of the hill consists of the carboniferous limestone, and the upper beds of the old red sandstone, consisting of red shales, clays, and grits, much indurated when in immediate contact with the secondary trap, which composes the greater portion of the hill, as also the whole range for five miles to the north and west. In writing the above, I do not mean to affirm that there will not be copper found at Carwinning Hill in sufficient quantity to work to a profit—that is yet to try; but the strata is not such as is known to yield much copper in other localities, and the copper ore itself is of a rich rare quality, hitherto scarcely ever found in quantity sufficient to work to a profit, As for the bell-metal copper, there have not been 5 lbs. of it found; and for the silver, it can only be worth anything in case the copper itself can be wrought to a profit.—A LOVER OF FAIR PLAY: *Glasgow, Jan.* 4.

MINING RECORDS.

SIR,—I should feel greatly obliged to you, or any of your numerous correspondents, for the information, whether there is at present any official place, where plans and drawings of mines in Cornwall, and other parts of the kingdom, are deposited for inspection; showing the different strata passed through during the progress of the workings, situation, nature of the lodes, &c.? If there is no such depository for the use and information of the public, I think there certainly ought to be, that adventurers about to buy shares, or enter any new mine, might examine them, and judge for themselves; and where the strata corresponds with that of one previously worked, the information gained would, in many instances, save considerable expenses in the mode of conducting the workings. I have no doubt, many mine agents are totally unaware of the most economic mode of working some strata, the appearances of which they have never before seen. This, I think, would be remedied by having plans, sections, and surface drawings, of all mines of five years' standing, and new plans, &c., for every five years' workings. For instance, all publications are deposited in the British Museum; and I beg to suggest, that it would confer great benefit on mining, if the plans and drawings were deposited there.

Brook-street, Jan. 11. J. BYLES.

[We believe there is no place, either in Cornwall or elsewhere, for the deposit of mine documents. The Museum of Economic Geology, Craig's-court, Charing-cross, would be the most proper situation; and Mr. Hunt, the curator, has long been exerting himself on the subject. Plans, sections, &c., are received there for public inspection, but there is at present no compulsion on mine agents to send them. A legislative enactment on the subject is much needed.]

THE KILBRICKEN MINES, IRELAND.

SIR,—The letter I wrote in your Journal of the 8th inst., was simply to show the disposal of the sum I received, as purchase money for Kilbricken Mine shares, being 5500*l.* for 550 shares (100 shares were not sold, but retained by the party who undertook the trouble of forming the company), in order that any party whom it could in any way concern, might see that the principle on which I proposed the formation of the company—viz: that I required to retain my half of the concern intact, but without further profit—was duly carried out. The only other point which has any interest for me, is the question, whether the prospects of the mine justified the sale of the half of it on the above terms? The data for judging this, are the repetition of the statements made at a preliminary meeting of the proposed shareholders before signing the cost-book, which were as follows:—That after an outlay of about 10,000*l.*, having made a discovery of ore, which required a still further expenditure to work it in depth, I proposed meeting it, by disposing of half the mine to a company. The following facts were then stated, to enable the parties to judge the value of the discovery:—That the profit made in the summer of 1846 was about 2000*l.*; the last month, when the bottoms were worked as low as possible, producing 40 tons of ore, worth 30*l.* per ton (this turned out to be when sold 39 tons 9 cwts., at 31*l.* 15s. 6d. per ton); and about 100*l.* worth of blende, in all about 1300*l.* The cost-sheets and account sales of ore were produced, verifying this, and can still be inspected by any shareholder. That the continuation of this course of ore in depth, and of other smaller ones, which had previously been discovered, and which, in all, had produced about 13,000*l.* worth of ore—and also the discovery of fresh ore, by extending the levels—formed the future prospects of the mine.

The probability of this was detailed in the report of the mine agents, who are generally of opinion that the workings, being only 22 fms. deep, are only on the top of the runs of ore; whilst the prospect of further discoveries, in extending the levels, are proved by some small shafts sunk on the course of the vein, in advance of the present ends, from 6 to 10 fms. deep, where a large quantity of blende and some ore have been obtained. The above statements, all proved by the necessary documents, appear to me quite sufficient inducement to invest in the concern (on the terms specified), without any amplification; and if shareholders, instead of forming their estimate from them, chose to avail themselves of any other representations more alluring, I cannot help it; but, with the above prospects still before them, it is absurd to call their shares valueless, though, perhaps, unsaleable. The following remarks are also necessary:—Capt. R. Williams, whose reports you quote, was no agent of mine, but the agent at Godolphin Mines; he had been agent at Kilbricken, in 1845, but left it in that year, preferring a situation in Cornwall; his last report, though not coinciding with his first (the interval of time accounting for this), speaks very favourably of the mine. The ore alluded to, as having failed in Mr. Evans's letter, was not in the bottom level, but some pitches left in the roof, which it was supposed might produce, before working out, 20 tons of ore a month, for about five months—they have, however, only produced 37 tons in all. The failure of these does not at all involve the future prospects of the mine; but, by realising 2000*l.* less than was expected, has, of course, increased the outlay required from the shareholders. The bottoms are, and have been, quite unworkable, and will remain so till the shaft has been sunk. HENRY CROCKFORD.

Queen's Ferry, Flintshire, Jan. 8.

[From this letter, an explanation is certainly given in regard to the 1000*l.* stated as being unaccounted for in the letter of "A Shareholder." It was, as it appears, given "to the party who undertook the trouble of forming the company." We think that this fact should have been stated in forming the company. 1000*l.*, besides a large premium in shares, seems, to our thinking, good pay. Mr. Evans repeats, that the ore failed in the "bottoms" (though he is unable to account for it); and that, instead of getting, as was expected, 30 tons per month, only 40 tons were raised in six months. Mr. Crockford seems to deny, that the ore failed in the bottoms. He says:—"The failure of ore, alluded to by Mr. Evans, was not in the bottoms at all, but in pitches in the roof." The report of Capt. Williams evidently favours the assertion of Mr. Evans; though, if Mr. Crockford's be the correct version, the shareholders have still some hope left—and we shall be glad, indeed, to see it realised. That we have had the feelings of a large portion of the shareholders with us, in the remarks we have felt called upon to make, we have reason to know; and we hope they will not be without benefit in stirring the company to exertion, if the prospects of the mine warrant it.]

THE KILBRICKEN MINES.

SIR,—I have no desire to occupy your space or time unnecessarily, and will, therefore, as briefly as I can, reply to your interrogatories respecting Kilbricken Mines, so far as they appear to you unanswered by my last letter. In the first place you ask, why, as chairman of the direction, &c., I "so suddenly resigned?" My reply is, simply, that I did not suddenly resign—that I was a director for *twelve months*, the full period I could hold that office without re-election, according to the rules of the company—that, in consequence of dissatisfaction having been frequently expressed towards the management, I was determined to relieve myself personally from further responsibility on that score; besides, I was living out of town (at Brighton), and I found it both inconvenient and expensive to give the required attendance. Since my resignation, a resolution has been passed by the company to remunerate, in future, the directors for their time and services. As my reasons for resigning were open to the knowledge of all parties interested—viz.: the shareholders—I thought it quite unnecessary to trouble you or the public with them. In the next place, you almost ask me to account for a course of ore "cutting out in two months." This I really cannot do; but merely repeat, that such was the fact—and that I have known the like circumstance to occur elsewhere. I reiterate, that I saw a good course of ore in some of the ends and in the bottoms at Kilbricken, in September, 1846; and yet, in two months, after the mine had been reopened by the new company, in the spring of 1847, these ores either diminished, or cut out entirely; and, instead of getting 20 or 30 tons per month during the summer, as we were led to expect we should from the prospects and reports of the captain, we did not get more than 40 tons altogether in six months. This great falling off in our anticipated returns set all our former calculations at defiance. The 3000*l.* repaid by Mr. H. Crockford out of the purchase-money, which had been considered as ample to pay for the new engine, and meet any deficiency of cost, &c., was soon swallowed up—and we were compelled to make calls, instead of paying dividends, as I expected; and upon which point, I had, perhaps, as you intimate, ventured to wager that such would be the case. I do not remember any director stating that 10,000*l.* worth of ores were discovered. Had the assertion been made at any of the public meetings, I think I must have heard it. There was no improper effort made, that I am aware of, to "work the shares to a premium." Capt. Richard Williams, in his first report, dated August 22, 1846, stated the probability of raising 100 tons per month. This, if realised, would have given a profit of 25,000*l.* a year, on a capital of 13,000*l.*, and have made the shares worth 50*l.* premium each, instead of 5*l.*—the highest price they were ever sold at.

In conclusion, I beg to state, that I do not join in the belief, that the Messrs. Crockford worked the mine unfairly; they had made, I am aware, upwards of 1800*l.* profit during the last five months of their working; but their steam-power would not allow them to sink deeper. This we knew; and I think we had no right to expect but that they would take away all the ore they could obtain, previously to resigning the mine to the new company. Mr. Crockford, in his notice of this subject, still indulges in a hope that we may yet have little cause for regret; but, after a careful perusal of Capt. Richard Williams's last report, dated Nov. 8th, to which you refer, and comparing it with the former one, dated Aug., 1846, I confess I am not quite so sanguine. W. C. EVANS.

Jan. 12.

THE KILBRICKEN MINES.

SIR,—In your remarks on Mr. H. Crockford's letter, in your Journal of the 8th of January, concerning Kilbricken Mine, you say that "Capt. R. Williams reported Aug. 22, 1846, that he thought from 90 to 100 tons of ore per month could be raised," &c. If you had fairly quoted the report, you would have said:—"With three or four shafts opened on the floor of silver-lead, there could be from 90 to 100 tons of ore raised each month," &c. Although the fine bunch of lead which I left is worked away to the water level, and the mine, in consequence, looks poor, yet it is by no means a poor mine; for, according to my last report, 20 tons of ore per month may be calculated on, when they get the shaft down to the 30 fm. level, and have opened on the floor a little way. You will say, there is a great difference between 20 and 100 tons, so there is a great difference between one shaft and three or four all opened, and working on the floor: of course, this must be the work of time, and the shareholders ought not to expect such results before they had opened the mine. The error seems to be this, as Mr. Crockford has stated, "that *more* outlay has been required to carry out the object than was anticipated." It must also be remembered, that the old engines had to be kept working all last summer, after the ore ground was worked away above water level, in order to cut down the shaft for the new engine—thus, there was a monthly cost of 400*l.* or 500*l.* going away, and no ores raising, which, with the payment of the engine, boiler, pitwork, new erections, &c., has taken away the cash, and the mine is just now as deep, and no deeper, than it was two years ago. R. WILLIAMS.

Jan. 11.

THE KILBRICKEN MINES, IRELAND.

SIR,—In your remarks upon the letter of Mr. Crockford, you state the company for working these mines was divided into 1300 shares—650 to be retained free by that gentleman, and 650 issued at 10*l.* per share. So far this is correct; but, as one of the original purchasers of a few of the 650 shares, at a premium upon 10*l.* per share, I certainly understood at the time, that Mrs. Crockford's half of the mine was obliged to be sold, and that 5000*l.* was the price. This sum was to be raised by the 650 shares, at 10*l.* each, leaving a balance of 1500*l.*, to be paid into the London and Westminster Bank, towards working the mine, and to which Mr. Crockford was to add 1500*l.*, in respect of his own 650 shares. Mr. Crockford's version is, that he only received 5500*l.*, and that out of this the 3000*l.* were paid towards working the mine. Even if this were the state of the case, there is a difference of 1000*l.* unaccounted for. On the whole, there is great mystification somewhere; and I, for one, beg to thank you for bringing it before the public.

Cornhill, Jan. 10. A SHAREHOLDER.

THE LAXEY MINES, ISLE OF MAN.

SIR,—Observing in your valuable Journal an advertisement for the sale of some shares in Laxey Mines, in the parish of Lonan, in the Isle of Man, with an account of their flourishing state, I must say, that I am glad to hear it—but I wish to state the fact, that I have not received any dividend for two years and upwards, and am moreover told, I shall have to contribute a considerable sum for loss incurred in the working of the mines during the time. I shall be glad if any of your correspondents can explain this. A PROPRIETOR.

Liverpool, Jan. 11.

THE "MODEL MINE"—WHEAL TRESCOLL.

SIR,—In reply to the letter of "A. A. H." (Redruth), published in your last week's Journal, I beg to inform him, and all your numerous readers, that I am the projector of this new scheme, and that I live at No. 5, Whitefriars-street, City—consequently, within the sound of the bells of St. Paul's. I feel extremely thankful to "A. A. H." for his kindness, in commenting on the subject; and, whether his criticisms assume the form of satire or commendation, they will lead to the consummation of my wishes—viz., public inquiry into the merits of the undertaking. I never use Latin quotations, and do not profess to understand the meaning of *quid pro quo*; but this I do know, that the "Model" will be a *quid to chew* for a great many the next six months to come. All the shares in this mine were taken up the first five hours they were open to the public; and all I can say for the present is, that I hope the confidence reposed in me by the gentlemen that have come forward to patronise this undertaking, will not be misplaced. I propose commencing operations on the mine about the 1st of February; and, at the end of six weeks from that date, you will be able to see, if I have accomplished the task I have set myself to do—viz., to drive a level 137 fathoms in length for 137*l.*, timbering included.

Whitefriars-street, City, Jan. 13. C. S. RICHARDSON, C.E.

CANON'S TOWN MINE—MINERS' WAGES.—John Roberts (of Lelant), and William Nicholls (of Penzance), were summoned by half-a-dozen miners, for non-payment of wages.—Mr. Roscorla attended for the defence.—Henry Curnow stated, that Capt. Roberts had agreed with himself and comrades to work the end of a mine, called Canon's Town Mine, in the parish of Ludgvan, at 3*l.* 10s. per fm., but upon the understanding that they were to be paid the usual wages of miners, alleging, as a reason, that he was about to sell some shares. After working some time on the end, they were put about other work, and at the end of the month they were paid off with 1*l.* a man. They now applied for fair wages, and considered 23s. each was now due—which would make their wages about 50s. a month.—Mr. Roscorla cross-examined the witness, but elicited nothing in favour of the defendants.—Mr. Carne said, it appeared that 3*l.* 10s. was less than the men ought to have had; but the captain had said, I want to sell shares—it will look better, and I will pay you wages. A thousand witnesses might be called after that. If parties transacted business in that way, they must take the consequences.—Captain Roberts denied the statement *in toto*.—The men said, that the same end was subsequently taken at 4*d.* a fm.—Witnesses were called for the defence, but without altering the case.—Mr. Roscorla intimated, that he had been wrongly instructed in the matter, and appeared indignant thereat.—The men were ordered to be paid 1*l.* each.—John Williams and comrades summoned the same parties, under somewhat similar circumstances, with a like result.—*Penzance Journal.*

ACCIDENTS.

Devon Great Consols.—T. Nicholls fell down a shaft at Wheal Maria, and fractured his skull: he was not dead when taken up, but is not expected to survive.

Arbour House Pit, Great Lumley.—T. Dixon, a tub driver, aged 11, whilst driving a horse with three tubs of coals, fell off the first, was run over, and killed.

Cwm Celyn.—John Jarvis, his son, and another man, had gone to work, in Cwm Celyn Three-fourth Pit, the colliery called the Big Vein, which is worked in what is called long work. Over the pit there is a rock top, which was never hitherto known to fall, without much previous notice. Jarvis, as usual, upon going to work, tried the top to ascertain if all was right, finding it, as he thought, safe. He was speaking with the man and his son, who stood by at the time, when the top fell, without any warning, and injured the two men very seriously. The son, George Jarvis, who was 10 years of age, was literally crushed to atoms, so that his remains were gathered in a sheet to be conveyed home. The poor lad was employed as door-keeper in the pit.—*Monmouthshire Merlin.*

Tipton.—T. Bagnall, aged 12 years, was killed by a fall of stone at Mr. Giles's limestone pit, Dudley Port.

Bilston.—S. Harris was killed by a fall of coal in Mr. Ward's colliery. The deceased was burnt, about eight week's since, in one of the stone pits at Sandy Gay colliery.

Clay Cross Colliery.—A boy, named Fox, was employed breaking the waggons on the incline, when his break-stick broke, and he fell between the wheels, and so shattered his arm, that it was found necessary to remove it at the shoulder joint. He was etherised; but reviving before the operation was completed, the surgeon again proceeded to apply the inhaler, when, coming in contact with the flame of the candle, it suddenly exploded, with a loud report; fortunately, however, no persons were injured, and the lad is doing well.

Ripley.—J. Gent was so injured by a fall of coal in the Mare Hay Coal-pit, that he died two days afterwards.

Holywell.—T. Williams, while ascending the shaft at the Lletty Colliery, was entirely, through his own carelessness, squeezed against one of the bearers, and afterwards fell 58 yards: he was quite dead. He had been cautioned of his recklessness the day before.

CWMERFIN MINE, CARDIGANSHIRE.

Cwmerfin Mine is situated to the north of Goginan, and the Bwlch Consolidated Mines, and about seven miles east of Aberystwith, the shipping port; the carriage costs about 6s. to 7s. per ton. The lode is large, yielding lead ore, containing a great deal of silver, some samples producing upwards of 40 ozs. of silver to the ton of lead. The mine lies between the very productive lodes of Goginan and Cwmsymlog—the latter famous as having made the fortune of Sir Hugh Middleton, who brought the New River to London. The district in which these mines are found has long been historically known as yielding considerable quantities of silver-lead ore. There are no precise accounts now extant of the working of Cwmerfin Mine. I am inclined, from the method adopted, to place the opening of the deep level, which may be considered the principal operation, about 200 years ago. This appears to be the time that the lowest level was opened in Goginan; and I am inclined, from the appearance of both mines, to conclude that the operations in both were conducted under the same management. At the engine-shaft, at Cwmerfin, where I have examined the vein under more advantageous development than in any other part of the mine, I find it to be about 12 feet wide. It possesses a good show of all the minerals which in this country realise the expectation of the miner. It is well crystalised, containing a large body of favourable quartz, with silver-lead ore, blende, carbonate of lime, and copper ore; the latter, though not met with in this district in sufficient abundance to pay for working, is, nevertheless, hailed as a favourable symptom in silver-lead lodes. The vein has been worked 126 fathoms east of the engine-shaft, by means of the shallow adit, where it yielded a great deal of solid ore; and from the appearance of the workings, as compared with those at the engine-shaft, I am led to the conclusion, that its width in the eastern part of the mine has never been fairly ascertained. The scheme of the more recent workings seems to divide the ore ground in two equal pieces: the middle shaft being placed 49 fathoms from both the eastern and western shafts—a system so well conceived that, in future workings, I see no good reason to deviate from it. The lode runs from a valley into a hill, both eastward and westward. In the western hill nothing has been done, although this ground does not appear to be unworthy of trial. The mine is, therefore (so far), in the eastern hill, and has been opened at different epochs, and by different systems, but principally by adit levels; and the western ground is also capable of being worked, to a very great extent, by means of the same method, affording backs of the height of 100 fathoms on the lode. The surface-workings, or open cutting, of Cwmerfin, may be attributed to a period cotemporary with the oldest workings in this country. In describing the nature and prospects of the mine, I shall contrast it with Goginan, because the two mines are peculiarly similar in most of their natural and artificial features. The greatest effort of working both these mines was the making of the deepest adit level; and I argue, from the method of its performance, the future condition, and probable value, of Cwmerfin. There can be no doubt that, originally, the ore held to the surface in both mines, whence it was worked by degrees so low, that the system of digging it by pits became unavailable, from the laborious work of lifting the ore stuff and water. Hence the necessity for driving the upper adits, now attributed to the time of the Romans, because they are nicely chisseled, and their direction has been scientifically attended to. These shallow adits were, in each mine, carried into the hills with great spirit. In Goginan, one of them reached a distance of 170 fathoms, being only 3 ft. high, and 18 in. wide; and in Cwmerfin, the shallow adit is driven 128 fathoms—a great distance, considering the remoteness of the period of mining, and that the utensils for facilitating labour were unknown, and the instruments of science for conducting such operations were undiscovered. It must be concluded, from all the evidence about these works, that these levels found the lode remuneratively orey; as the necessity for the deepest level arose from the exhaustion of the ore ground above and below the shallow adit. In surveying the work done in the deepest adits of these mines, a chain of evidence occurs which shows that both Goginan and Cwmerfin, at this period, abounded with good ore ground at these levels, and were very valuable mines. Indeed, it may be shown, with considerable certainty, that the object of saving height appears to have weighed heavier in Cwmerfin than in Goginan. In Goginan, the natural fall gave a back, or section, of the vein of 10 fathoms, which, by receding into the valley, was increased to 13 fathoms. In Cwmerfin, the natural fall was 3 fathoms, which, by the same means, was increased to 8 fathoms. It is, therefore, evident that the projector of this level saw the necessity for saving every inch of height that could be obtained, as he has gone a distance of 150 fathoms in the valley, from the natural base of the hill, to save a perpendicular height of 5 fathoms—thereby causing to himself a work of tediousness and cost, that nothing could have justified but a valuable section of ore ground. This level has at the eastern end a height of 48 fathoms of lode upon it; and the whole ground above, and in places for 10 fathoms below, has been worked away for ore. A set of stamps were erected in this mine, for the purpose of dressing the ore obtained, by means of the deep adit machinery, of greater extent than seem to be supplied to any other mine then at work in the neighbourhood. In the recent attempts to open the mine, and to bring it under the modern system of mining, a 20-feet wheel, with pumps and crushing mills has been erected. The old workings have been cleared out, and a communication made between the eastern and the middle shaft by means of a 10 fm. level; and, throughout the whole of this work, ore in fair quantities continued to be got; and, in cutting down the sides of the level in the last months' working, four men rose 60*l.* worth of ore. I am, therefore, convinced, that, if the shafts were sunk, and the levels driven, and the adit end continued eastward, the mine would soon become a profitable one; and, as the whole of the workings yet made, when taken together, can only be considered the digging out of the surface of the lode, it is reasonable to expect, by deepening, that the produce of the vein will be improved and augmented. The superficial portions of the mines in this country possess less substance and solidity than the lower. What has recently been done is a step in the right direction. That the results will be very favourable to those who will carry on the work with spirit and fair mining ability, I firmly believe; and I have no difficulty in taking upon myself the responsibility of advising, that the mine be prosecuted vigorously.

Goginan, Jan. 11. MATTHEW FRANCIS.

SIR,—In reply to your inquiry as to Cwmerfin, I am very glad to let you have my opinion on it as far as I could ascertain from a surface inspection, and from the information readily given to careful questioning. The lode, or vein, on which the Cwmerfin Mine is opened is parallel to those of Foncraig-dhu, Goginan, Bwlch Consols, and Cwm Sebor, and forms one of the silver-lead veins peculiar to this part of Cardiganshire; it has been extensively worked in the hill above the adit level. The deepest workings are 10 fms. only below the adit, and have been found productive as far as sunk. I believe the mine will be found to possess precisely similar characters to its neighbours, the Goginan and Bwlch Mines, though varying, of course, in the size of the vein and other local circumstances, yet it appears to me to possess the same general features. I am led to this conclusion, from observation of the piles of lode stuff at the shafts, and on the dressing-floors. The lode is large, and reported to be about 10 ft. wide, and containing strings and branches of steel-lead (silvery) ore, the general price of which has been from 15*l.* to 16*l.* per ton, though now temporarily less from the late general depression. I was, moreover, informed from distinct sources, that the length of ore ground worked in the 10 fm. level is very considerable, and that, probably, a portion of the lode still remains to be taken down in the side of the 10 fm. level, as has been recently found to be the case in the Bwlch Mine. I will now say a word or two of the advantages possessed by this property. There is ample water-power above for pumping, crushing, and dressing the ores, whilst the quantity of water in the mine is inconsiderable, the pumps being of 4 in. diameter only. There is on the mine a good water-wheel used for pumping, and to work a crusher, and the buildings and dressing-floors are suitable for immediately returning the ore, without further cost of consequence. In short, everything is ready to commence without delay, and I am firmly of opinion, from what I have seen and heard, that it will only be necessary to sink the shaft, extend the present, and bring in the 20 fm. and deeper levels to make it a remunerative undertaking; and shall feel pleasure in becoming a shareholder with you.—HENRY THOMAS, F.G.S: 8, *George-yard, Lombard-street, Jan.* 11.

NEW PATENTS.

G. Bell, Dublin, merchant, for certain improvements in the arrangement of wheels and axles for steam and other carriages, which facilitate travelling on railways and common roads—parts of which improvements are applicable to other machinery.

J. Mongomery, Salisbury-street, Middlesex, for certain improvements in pianofortes and other similar finger-keyed instruments. (Being a communication.)

A. A. de Reginald Hely, Cannon-row, Westminster, and J. E. Norton, Saint Mary-le-Strand-place, Kent-road, Surrey, wine merchant, for certain improvements in bottles or vessels for containing liquids, and in the mode of and machinery or apparatus for filling and stopping the same.

G. Stow, late of King-street, Cheapside, but now of New York, gentleman, for improvements in apparatus for propelling ships and other vessels.

W. Thorold, Norwich, engineer, for improvements in turn-tables.

R. Wilson, M.A., Greenock, for improvements in certain kinds of rotatory engines worked by steam or other elastic fluids, part of which improvements are applicable to rotatory engines worked by water, or by the wind; also, an improvement in safety-valves for steam-boilers.

S. E. Morse, Ampton-place, Gray's-inn-road, for improvements in the manufacture of p at s or surfaces for printing or embossing.

B. Mitchell, Huntingdonshire, for improvements in the manufacture of manure.

R. Heath, Heathfield, Manchester, gentleman, for certain improvements in the method of applying and working friction brasses to engines and carriages used upon railways.

J. Cut'er, Sparkbrook, Birmingham, C.E., for certain improvements in welded iron pipes or tubes to be used as the flues of steam-boilers.—*Mechanics' Magazine.*

THE EAST INDIA RAILWAY COMPANY.—The East India Railway commissioners, who went out by the *Bentinck*, with their staff of engineers, have not lost time in commencing their operations. They have, however, very properly limited the proceedings to a very careful re-examination of the country round and near Calcutta, and the opposite side of the Hoogly, with a view of finally deciding upon the relative advantages of making Calcutta or Howrah the starting point. This operation will engage the engineers for about three weeks, or a month; and, in the interval, such other arrangements are in progress, as will not involve any immediate expenditure, while they contribute materially to the advancement of the entire undertaking. The commissioners have, it is understood, adopted a course which, under all circumstances, appears the most prudent and advantageous for the shareholders, though it may retard the completion of the great work in some measure. They have decided upon expending only so much as shall be indispensably necessary during the next few months, in lieu of proceeding as rapidly as they had prepared for, and to adopt their arrangements to the altered circumstances of the money market, and remain prepared for more active measures, as soon as they shall be advantageously practicable. The company are now enjoying the fruits of early good management and economy; and, in lieu of being driven to the alternative of forcing calls, or suspending all proceedings, they are enabled to avoid both the one and the other, and, by a judicious regulation of their arrangements, to limit their operations without abandoning their object, and they have the means of providing for their expenditure from their early and well husbanded resources. The subject is deserving something more than a passing comment, from its rarity among public companies generally, at least, in this country. They may manage better in England, but the instances are not the rule, but the exception. It is most earnestly to be hoped, that whatever fluctuation may take place in the money market, the funds for this most important undertaking will not be withheld, when the existing and, it is believed, temporary depression shall have subsided. Every hour adds new converts to the invaluable benefits which a railway will bestow upon India, which cannot be too highly rated, or scarcely too dearly purchased. Railway expenditure in the country will do more to secure and consolidate the Government—to augment its revenues—to extend its commerce—and promote the true and permanent interests of its vast community, than from such simple means could be inferred from any past experience in Europe or elsewhere. A railway in India judiciously carried out will hereafter be admitted to be without a parallel, in the nature and extent of the benefits which will have accrued from it —*Extract of a Letter from Calcutta.*

WHEAL SETON.—In our City article of last week, we alluded to a rumoured defalcation to a very large amount, by a purser of one of the greatest dividend-paying mines in Cornwall. We alluded to Wheal Seton, and it gives us the most unfeigned satisfaction, from whatever source the base and unfounded report originated, to be able to give it the most unqualified contradiction. The much respected, and, in this case, calumniated, purser (Mr. T. H. Tilly), on first hearing the accusation, naturally indignant, lost no time in calling a meeting, which was held on Monday last, the 10th inst., and attended by the largest and most influential of the shareholders, when the following resolutions were passed by an overwhelming majority:—"That Mr. Tilly, having explained the circumstances which induced him to convene the meeting, and having produced a statement of his accounts as purser, from which it appears, that all sums charged in the accounts laid before the meeting of adventurers, held on the 14th Dec. last, and which have become payable, have been duly paid; and having laid on the table the amount in cash, of the balance due from him on such accounts, the cordial thanks of the adventurers be accorded to Mr. Tilly, for the satisfactory manner in which he has discharged the duties of his office as purser, since his appointment in 1834, and for the untiring zeal and energy which he devoted to the prosecution of the adventure, during a long series of years of difficulty and discouragement, which this meeting cannot but feel contributed mainly to the present position of the mine."—"That this meeting, fully appreciating the difficulty in which Mr. Tilly was placed, by the circumstance detailed in his letter to Mr. James Harvey, of the 18th Dec. last, and sympathising with the honourable feelings which induced him to relinquish his office as purser, cordially approve of the promptitude with which he has provided the means of liquidating all claims on him in respect to the mine. This meeting, therefore, considers him entitled to the unabated confidence of the adventurers, and declines to receive his resignation, and requests him to retain the office of purser, adopting the principle that he has himself enunciated; that the balance now in hand, and all money to be received, be deposited in some bank, to his credit as purser, on an account to be opened with a banker, to be named by the adventurers."

AUSTRALIAN MINING COMPANY.—Letters have been received at this company's office, dated Adelaide, Sept. 25th, 1847, announcing the arrival of the *Rajah*, with the mining captain, sub-captains, and efficient corps of miners, sent by the Australian Mining Company, all in good health.

DEATH OF A MINING AGENT IN THE QUEEN'S PRISON.—An inquest was held yesterday (Jan. 14), by Mr. Payne, the coroner, at the Queen's Prison, Southwark-bridge-road, on the body of Samuel Lyle, aged 66, late a prisoner thereof, whose death occurred under the following melancholy circumstances:—The evidence proved that deceased, who had been an agent to a mining company, and had been incarcerated for the last six years; and, in consequence of the neglect he experienced by his friends latterly, he became very despondent, and suffered great anguish of mind. His wife and son were in Cornwall. He had been ailing for the last two years; and, about two months since, an application was made, by order of the governor of the prison, to the parties, at whose suit he was imprisoned, offering a sum of 10*l.* for his discharge, but which was refused. The symptons of deceased's malady became more acute, and he died on Thursday morning last, at 8 o'clock, of cancer in the stomach.—Verdict—"Natural death."

DEATH OF MR. BENJAMIN CUBITT.—We regret to have to announce the decease of Mr. Benjamin Cubitt, the mechanical engineer, and locomotive superintendent of the Great Northern Railway. He died at Derby, on Wednesday last, in the 54th year of his age. Mr. Cubitt was locomotive superintendent of the Brighton, Dover, and Croydon Companies, when the working stock of these companies was consolidated at New Cross. He was very much respected by all parties on the lines, and his loss will be severely felt by the company, and sincerely lamented by the profession. He was a brother of Mr. William Cubitt, the eminent civil engineer.

SOUTH WALES RAILWAY.—The directors have given orders to the contractors of this line to finish that portion between Swansea and Newport with all possible dispatch, in order that it may be opened in the ensuing spring.

LOUTH AND GREAT GRIMSBY.—This line will be opened to New Holland on the 1st of February.

STAMFORD AND OAKHAM RAILWAY will be opened for traffic on the 14th Feb.

NORTH STAFFORDSHIRE RAILWAY.—The portion of this line between Stoke-upon-Trent and the point of junction with the London and North Western Railway at Stone is nearly completed, and will be ready for opening shortly.

WISBEACH AND WATLINGTON.—This short line has been inspected by the Government inspector, and will be opened next week.

BIRMINGHAM AND OXFORD JUNCTION RAILWAY.—An adjourned meeting was held at Dee's Royal Hotel, Birmingham, yesterday.—P. H. MUNTZ, Esq., in the chair.—The CHAIRMAN, on taking his seat, said, the present was an adjourned special meeting, and the time fixed for commencing the business had arrived.—Mr. COLMORE, solicitor, then said, the chairman was probably aware, that the Lord Chancellor had announced his intention to take the appeal against the decision of the Vice-Chancellor next week; and, under those circumstances, it would not be necessary to proceed with the business that day. It was, therefore, proposed to wait the decision of the Chancellor—which, in all probability, would be known the week after next. He should, therefore, move, that the meeting be adjourned to the 28th instant.—A SHAREHOLDER seconded the resolution.—The CHAIRMAN said, he hoped most sincerely some decision would be given, to put an end to the long and unhappy contest in which they had been engaged, and which had been so injurious to railway property generally. He hoped some settlement might be come to, one way or another.—The resolution was then put and carried; and the meeting separated.

COST OF RAILWAYS.—In the *Shareholders' Manual* of Mr. Tuck, it is shown that the cost for the construction of lines of railway in the United Kingdom has ranged from 8570*l.* for the Dundee and Arbroath up to 287,678*l.* per mile for the Blackwall. The German lines have only averaged a cost of 11,000*l.*; and in Belgium, the average cost of the State lines was 17,132*l.*; and it appears that the French lines are quite as expensive as the English. The American railroads are by far the cheapest, the average cost being only $23,000 per mile upon about 6000 miles completed.

THE OAK FARM IRON COMPANY.

The adjourned meeting of the creditors of the Oak Farm Iron-Works, near Dudley, was held at the Royal Hotel, Birmingham, yesterday—CHARLES SHAW, Esq., in the chair.—The meeting was for the purpose of receiving a report from the gentlemen appointed at the first meeting in December, to inquire into the state of the affairs of Messrs. Boydell and Roper, the principals in these works. The discussion is understood to have been of a somewhat stormy character; but, as reporters were not admitted, we shall abstain from entering into particulars, beyond those which are gleaned from the circular issued after the meeting broke up. Mr. Freshfield, of London, solicitor to the Bank of England, attended on behalf of the great mortgages and former proprietors (Lord Lyttleton, Sir Stephen Glynne, and the Right Hon. W. E. Gladstone), and Mr. W. B. Collis, solicitor, of Stourbridge, to whom the partners committed the conduct of their affairs upon the suspension of the works. The following statement of accounts was submitted to the meeting:—

General Statement of the affairs of the Oak Farm Company, Dec. 23, 1847.

To sundry creditors, on bonds and mortgages, 119,700*l.*; amount due to Sir S. Glynne, Mr. Gladstone, and Lord Lyttleton, 36,710*l.*; interest on the above, 1800*l.*	£158,210	0	0
To sundry creditors, who hold guarantees, 59,113*l.* 7s.; ditto, on acceptances, and open accounts, unsecured, 36,843*l.* 12s. 5d.; liabilities on bills under discount, 53,518*l.* 14s. 4d.—of which it is expected there will be duly paid, 51,463*l.* 10s. 9d.—leaving to claim on the estate, 2055*l.* 3s. 7d.	98,012	3	0
To sundry creditors, railway and canal companies and carriers, who have stopped goods to cover their claims, 4098*l.* 13s. 3d.; royalties and rents, 2828*l.* 14s. 10d.; J. Boydell, capital, 24,500*l.*; C. Roper, ditto, 33,500*l.*	58,000	0	0
Total liabilities	£314,222	3	0
By amount of debtors good, 15,745*l.* 1s. 5d.; less goods charged in the above, but stopped by carriers, &c., for amount of their claims, as per contra, 4098*l.* 13s. 3d.	£ 11,646	8	2
Ditto, doubtful, 1354*l.* 13s. 1d., is estimated to yield	434	1	8
Amount of stock disposable at stock prices, 32,288*l.* 6s. 10d.; less 15 per cent, 4843*l.* 5s.; subject to the lien of Patterson and Walker, for the amount of their acceptances and balance of account, 13,664*l.* 15s. 5d.	13,780	6	5
Stock of machinery and appurtenances to works considered available to general creditors, 70,342*l.* 15s. 10d.; estimated to produce, if sold to be removed (one half), 35,171*l.* 7s. 11d.	35,171	7	11
	£61,033	0	2
Less rent and royalties due to Sir S. R. Glynne, 2562*l.* 2s. 8d.; ditto, Lord Ward, 266*l.* 12s. 2d.	2,828	14	10
Total	£58,204	5	4

This statement of accounts, and the rights of the lessee and mortgagees of the property, and of the retiring partners, having been considered by a majority of the unguaranteed creditors of Messrs. Boydell and Roper, and taking the whole of the items and circumstances into consideration, and particularly having noted the small amount of assets that will be available for the unsecured creditors in the event of bankruptcy, owing to the large amount of the mortgages and of the other claims; and Mr. Freshfield, on the part of the retired partners, having consented to pay 9s. in the *l.*, by two instalments at four and six months each, on the several debts due to the unguaranteed creditors, by the bills of Messrs. Boydell and Roper, the payment thereof to be guaranteed by a deed of covenant to be executed by the old partners, it was resolved, on the motion of Mr. SPARROW, seconded by Mr. ADDENBROOK—"That it is the interest of the unguaranteed creditors of Messrs. Boydell and Roper to accept such composition; and this meeting strongly recommends the creditors not here present to accede to these terms; and that a copy of the resolutions be sent to each creditor."

The thanks of the meeting were voted to Mr. Evers and his brother inspectors, for the efficient manner in which they have discharged their difficult duty.—The actual amount of capital invested in this concern by Messrs. Boydell and Roper has been 36,000*l.*, of which no less than 33,000*l.* was brought in by Mr. Roper, within the last two years.—For them the utmost sympathy and good feeling was manifested by all present at the meeting.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Eleven o'clock.

Bank Stock, 9 per Cent., 196½ 4	Belgian Bonds, 4½ per Cent., —
3 per Cent. Reduced Ann., 86¼ ¼	Dutch, 2½ per Cent., 54¼ ¾
3 per Cent. Consols Ann., 88 7	Brazilian, 5 per Cents., 83 1
3 per Cent. Annuities, —	Chilian, 6 per Cents., 88½
3½ per Cent. Ann., 89¼ ¾	Mexican, 5 per Cents., 17½ 18
Long Annuities, 8¾	Spanish, 5 per Cents., 19½
India Stock, 10½ per Cent., 236 3	Ditto 3 per Cents., 29¼ ½
3 per Cent. Consols for Opg, 86¾ 7¾	Portuguese, 4 per Cents., 36¼ ¾
Exchequer Bills, 1000*l.* 3d., 24 27 24 pm.	Russian, 5 per Cents., 109

MINES.—In the mining share market a little more activity has prevailed during the week; several large transactions have been made, and the inquiries for others at buyers' prices have continued.

Devon Great Consols have been done, and appear firm at our present quotation; we learn that the lode going east has considerably improved since our last.

Treviskey and Barrier and South Wheal Francis have been inquired for, and some business has been done in the former.

Inquiries have also been made for Trethellans, South Wheal Basset, South Wheal Tolgus, North Roskear, Plymouth Wheal Yeoland, Marke Valley, &c.; but the offers made have not reached sellers prices generally.

Business has been done in Trehane, Herodsfoot, Mary Ann, Trelawney, Devon Great Consols, West Providence, Treviskey and Barrier, Callington, West Wheal Jewel, Devon and Courteney, Condurrow, Marke Valley, &c. &c.

Holmbush is reported to have improved in the lead lode in the 10 fm. level; but to what extent we have not as yet been advised.

As some evidence of a progressing improvement in our mining interest, we adverted a short time since to the formation of companies for working several new mines, or, rather, the resuming operations of suspended ones. Among the many, we have much pleasure in referring to a company, formed during the week for reworking the Cwmerfin Mine, in Cardiganshire, North Wales. The prospects represented in a report, furnished by a talented practical agent of great experience in the mineralogy of the principality, is, we consider, a great inducement for the enterprising capitalist; whilst the terms upon which the shares have been taken may be deemed easy and equitable.

Wheal Trescoll, or the "*Model Mine*" (a prospectus of which appeared in our columns about a fortnight since), has been taken up by a private party, and from what we can learn from unbiassed, and, we would say, *unprejudiced* persons, the lode is very likely to become very productive; we therefore trust that the four parties, who have thus spiritedly taken up the adventure, may find it one of great profit.

It is with great satisfaction we learn that the East and South Tamar Mines are about being resumed by a highly influential and responsible London company. The former company ceased operations about four months since, in consequence of the then unprecedented monetary pressure, although, at the same period, the most satisfactory results were manifest. The two mines are to be consolidated, and the terms of purchase are most advantageous to the present company. The energy and ability of the leading adventurers are well known to the mining interest, and a sufficient guarantee that the management will be of the most effective, judicious, and business-like character.

There has been a demand for shares in foreign mines during the week, and several large transactions have taken place; the following have been done—viz.: Australians, Imperial Brazilians, Altens, Kinzigthals, St. John del Rey, and Bolanos.

The second moiety of 6*l.* 5s. has been paid on the 1200 shares in the Deep River Company this week.

RAILWAYS.—There was but little difference at the commencement of the week in the amount of business transacted in shares, in comparison with the close of the previous one; but in prices there was some little tendency upwards. On Wednesday and Thursday there was a fair sprinkling of business, and rather more in the lighter descriptions of shares than of late has been usual—still expected calls force sales, and, in some cases, there was a slight decline. The business transacted yesterday was of a similar nature, and, upon the whole, the business of the week has been of a more encouraging nature than for some months preceding.

HULL, THURSDAY.—Since our last we have had better markets, although there has not been much actual business. Yesterday there was an evidently improved feeling, and, at late prices, a fair amount of stock might have been quitted. To-day, however, the market has not been quite so buoyant.

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	*Traffic Returns.* 1848	1847
Arbroath and Forfar	15	£179,939	26	4*p.c.*	£ 177	230
Chester and Birkenhead	15	706,793	38¼	—	604	585
Dublin and Drogheda	35	733,558	52	3½	634	659
Dublin and Kingstown	7¾	473,282	—	7	654	559
Dundee, Perth, and Aberdeen	36½	285,745	30	6	701	364
East Lancashire	24	1,207,490	21½	—	998	845
Eastern Counties	202½	7,698,370	16	5	10124	8284
Eastern Union	43½	979,926	45	-	1120	502
Edinburgh and Glasgow	50	2,375,745	44½	6	3410	3999
Edinburgh and Northern	29	953,207	21	—	747	—
Glasgow, Paisley, and Ayr	60½	1,890,547	72	7	2135	2710
Glasgow, Paisley, & Greenock	23	838,964	17½	3	972	1220
Gt. Southern & Western, Ireland	110½	1,876,326	22	—	1573	1017
Great Western	240½	10,630,763	95	8	14501	14424
Kendal and Windermere	10½	147,001	23	—	95	—
Lancaster and Carlisle	70	1,291,913	56	—	1040	—
Lancashire and Yorkshire	92½	6,807,314	74	7	8723	8705
London and North Western	428	20,010,467	152	9	33862	34095
London and Blackwall	4	1,145,289	4¾	¾	684	660
London, Brighton, & South Coast	147	5,659,180	43¾	4	6194	5363
London and South-Western	186	5,836,132	54¾	9	6120	5900
Londonderry and Enniskillen	14½	160,013	16	—	128	—
Manchester, Sheffield, & Lincolnsh.	49½	2,078,135	80	5	1966	2229
Maryport and Carlisle	28	424,417	—	3	521	518
Midland Company	382	8,658,604	112½	7	17268	16775
Midland Great Western (Irish)	26¼	583,776	—	—	746	—
Newcastle and Carlisle	65	1,184,080	117	6	1924	2019
Norfolk	70½	1,375,633	85	6	1856	1253
North British	78	2,514,150	26	5	2004	1444
Shrewsbury and Chester	17	591,158	21½	—	576	299
South Devon	29	1,339,860	22	—	754	403
South-Eastern	157½	6,398,218	31	6	7056	7522
Taff Vale	38	785,607	—	5½	1487	1329
Ulster	25	646,211	52	6	644	683
Whitehaven Junction	12	130,000	—	4½	155	—
York, Newcastle, & Berwick	236½	3,685,102	34¾	9	9564	7368
York and North Midland	196	3,196,869	76¼	10	6441	4976

Total earnings for last week, £160,026, being an increase of £21,726 over last year.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Bate's West Hartley 24 6—Chester Main 23—Hasting's Hartley 24 6—New Tanfield 21—North Percy Hartley 24 6—South Derwent Hartley 21—Tanfield Moor 20 6—Tanfield Moor Butes 19—Townley 23—Twizel Main 21—Walker's Primrose 20—Wylam 23—Wall's End Bell and Brown 24 9—Bewicke and Co. 24 9—Clarke and Co. 23 3—Elm Park 23 6—Framwellgate 24—Gosforth 24 9—Heaton 24 9—Hedley 24 6—Killingworth 24 3—Riddell's 24 6—Walker 24 6—Washington 23 6—Wharncliffe 24 9—Willington 23—Eden Main 25 6—Belmont 25 6—Braddyll's Hetton 26—Bell 25 3—Haswell 26—Keepier 26—Lambton 26—Shotton 25 6—Stewart's reshipped 25 3—Caradoc 25 9—Hudson's Hartlepool 25 3—High Thornley 22—Heugh Hall 24 9—Trimdon 24 6—Adelaide Tees 25 6—Brown's Deanery 24 9—Denison 24—Gordon 22—Richard's Tees 23 9—Seymour Tees 25—South Durham 24 6—Tees 26—West Hetton 24 6—Woodefield 21—Whitworth 21—Anthracite 27—Cleveland Coke 24—Derwentwater Hartley 24—Sidney's Hartley 24 6—Sir J. Hope's Steam 21—Albert 22.—Ships at market, 167; sold, 14

WEDNESDAY.—New Tanfield 18 6—New Pelton Main 21—Tanfield Moor 19 6—Wall's End Gosforth 24 9—Stewart's 26 6.—Ships at market, 20.

FRIDAY.—Adair's Main 18 6—Buddle's West Hartley 20 6—Chester Main 20—Carr's Hartley 20 6—Dipton Tanfield 16—Hastings Hartley 20 6—Holywell Main 22—New Tanfield 17—North Pontop 16 6—Ord's Redheugh 19—Original Tanfield 16 6—Ravensworth Pelaw 17—South Moor Hartley 17—Tanfield Moor 18—West Hartley 20 6—West Wylam 19 6—Wylam 20—Eden Main 22—Derwentwater Hartley 20—Sidney's Hartley 20 6—Snapethorpe 19—Wall's End Bewicke and Co. 21 6—Brown's Gas 17—Killingworth 21 3—Ramsay 16—Wharncliffe 21 6—Belmont 22—Braddyll's Hetton 22 9—Haswell 23—Hetton 23—Lambton 22 9—Russell's Hetton 22 9—Stewart's 23—Whitwell 20 6 to 21—Caradoc 22 6—Hudson's Hartlepool 21 6—Heugh Hall 21 6—Kelloe 22 6—Adelaide Tees 22 6—Seymour Tees 22 6—South Durham 21 6—Tees 22 9—West Pease 18—West Hetton 21—Woodefield 18—Whitworth 18 6 to 19.—Ships at market, 440; sold, 189; unsold, 251.

THE COAL TRADE OF THE TYNE.—At the annual meeting of the Commissioners under the Coal Turn Act, held at the Northumberland Arms, North Shields, a few days ago, the following statement of the shipments of coal from the Tyne, from Dec. 1, 1846, until Dec. 1, 1847, was read by the clerk, John Tinley, Esq.:—

December, 1846	keels 8,720	June	keels 12,371
January, 1847	12,176	July	12,102
February	9,847	August	14,968
March	12,537	September	14,553
April	11,196	October	15,323
May	12,906	November	16,115

Being a total of 152,804 keels, or 1,222,432 chaldrons—equal to 3,939,444 tons.

LATEST CURRENT PRICES OF METALS.

LONDON, JANUARY 14, 1848.

	£ s. — £ s. d.		£ s. — £ s. d.
IRON—Bar a..Wales..ton	7 0—7 0 0	COPPER—Ord. bottoms ..	0 0—0 0 12
,, ..London ..	8 5—8 5 0	YELLOW METAL SHEATHING	0 0—0 0 9¼
Nail rods ,, ...	0 0—9 0 0	TIN—Com. blocks g..cwt.	0 0—4 2 0
Hoop(Staf.) ,, ...	0 0—9 15 0	,, bars	0 0—4 3 0
Sheet ,, ,, ...	0 0—10 15 0	Refined	0 0—4 6 0
Bars ,, ,, ...	0 0—9 5 0	Straits h	0 0—3 18 0
Welsh cold-blast foundry pig ..	4 0—4 10 0	Banca	0 0—4 4 0
		TIN-PLATES—Ch., IC i, box	1 8—1 10 0
Scotch pig b, Clyde	2 8—2 9 0	,, IX ...	1 14—1 16 0
Rails, average	7 0—7 10 0	Coke, IC	1 3—1 4 0
Chairs	0 0—4 17 6	,, IX	1 9—1 10 0
Russian, CCND c..	0 0— —	LEAD—Sheet k ......ton	0 0—19 0 0
,, PSI	0 0— —	Pig, refined	0 0—19 10 0
,, Gourieff	0 0— —	,, common	0 0—17 15 [illegible]
,, Archangel	0 0—13 10 0	,, Spanish, in bd.	0 0—17 0 0
Swedish d, on the spot	11 0—11 5 0	Red	0 0—19 10 0
,, Steel, fagt.	0 0—16 5 0	Dry White	0 0—24 0 0
,, ,, kegs e	0 0—14 0 0	Shot (Patent)	0 0—20 10 0
COPPER—Tile f	0 0—97 0 0	SPELTER—(Cake) l on spot	19 15—20 0 0
Tough cake	0 0—98 0 0	,, for arrival	0 0—19 7 6
Best selected	0 0 101 0 0	ZINC—(Sheet) m export.*	0 0—27 0 0
Ordin. sheets, lb. ...	0 0—0 0 11	QUICKSILVER n ......lb.	0 0—0 4 6

PRICES OF METALS MONTHLY DURING 1847.

		1st Jan.	1st Feb.	2d March.	1st April.	3d May.	2d June.	1st July.	3d August.	2d Sept.	1st Oct.	2d Nov.	2d Dec.	
IRON ......Bar ......in Wales	p. ton	£9 0 0	£9 0 0	£9 0 0	£8 15 0	£8 15 0	£8 10 0	£8 10 0	£8 10 0	£8 15 0	£8 12 6	£8 10 0	£7 15 0	Discount, 2½ per cent.
Ditto ......in London	,,	10 0 0	10 0 0	10 0 0	9 17 6	9 15 0	9 10 0	9 10 0	9 10 0	9 15 0	9 15 0	9 12 6	8 15 0	,, ,,
Nail Rods ,,	,,	10 15 0	10 15 0	10 10 0	10 10 0	10 10 0	10 10 0	10 10 0	10 10 0	10 15 0	10 15 0	10 15 0	10 0 0	,, ,,
Hoop(Staffordsh.) ,,	,,	12 0 0	12 0 0	12 0 0	12 0 0	11 15 0	11 15 0	11 15 0	11 15 0	12 0 0	11 15 0	11 15 0	11 10 0	,, ,,
Sheet ,,	,,	13 0 0	13 0 0	13 0 0	13 0 0	13 0 0	13 0 0	13 0 0	13 0 0	13 0 0	13 0 0	13 0 0	12 0 0	,, ,,
Bars ,,	,,	11 0 0	11 0 0	11 0 0	11 0 0	11 5 0	11 5 0	11 5 0	11 5 0	11 5 0	11 5 0	11 0 0	10 10 0	,, ,,
Scotch Pig....in the Clyde	,,	3 14 0	3 12 6	3 14 0	3 12 6	3 5 0	3 2 6	3 5 0	3 8 0	3 6 0	3 4 0	2 15 0	2 8 0	,, ,,
Railway Bars	,,	9 15 0	9 15 0	9 10 0	9 5 0	9 0 0	9 0 0	8 15 0	9 0 0	9 0 0	8 15 0	8 10 0	8 0 0	Net.
Russian*—Archangel	,,	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0	Discount, 2½ per cent.
Swedish	,,	11 15 0	11 15 0	11 15 0	11 15 0	11 15 0	11 15 0	11 15 0	11 5 0	11 5 0	11 5 0	11 5 0	11 5 0	,, ,,
,, Steel—faggots	,,	16 0 0	17 0 0	17 0 0	16 10 0	16 5 0	16 5 0	16 5 0	16 5 0	16 5 0	16 5 0	16 5 0	16 5 0	,, ,,
,, in kegs ¼ and ½ in.	,,	15 10 0	15 15 0	15 0 0	15 0 0	15 0 0	15 0 0	15 0 0	14 15 0	14 15 0	14 15 0	14 10 0	14 0 0	,, ,,
COPPER....Tile†	,,	87 10 0	87 10 0	92 0 0	97 0 0	97 0 0	97 0 0	97 0 0	97 0 0	97 0 0	97 0 0	97 0 0	97 0 0	Discount, 3 per cent.
Tough Cake	,,	88 10 0	88 10 0	93 0 0	98 0 0	98 0 0	98 0 0	98 0 0	98 0 0	98 0 0	98 0 0	98 0 0	98 0 0	,, ,,
Best selected	,,	91 10 0	91 10 0	96 0 0	101 0 0	101 0 0	101 0 0	101 0 0	101 0 0	101 0 0	101 5 0	101 0 0	101 0 0	,, ,,
Ordinary Sheets	p. lb.	10d	10d	10½d	11d	11d	11d	11d	11d	11d	11d	11d	11d	,, ,,
,, Bottoms	,,	11	11	11½	12	12	12	12	12	12	12	12	12	,, ,,
YELLOW METAL SHEATHING	,,	8½	8½	8¾	9¼	9¼	9¼	9¼	9¼	9¼	9¼	9¼	9¼	,, ,,
TIN......Common Blocks	p. cwt.	98s	98s	98s	98s	95s	92s	88s	88s	85s	85s	85s	85s	Discount, 2½ per cent.
,, Bars	,,	99	99	99	99	96	93	89	89	86	86	86	86	,, ,,
Refined	,,	101	101	101	101	98	95	91	91	90	90	90	90	,, ,,
Straits	,,	98s 6d	98s 6d	97	92	90	86	84	84	82	82	81	81	Net cash in bond.
Banca	,,	102s	101s	100	100	94	92	88	86	84	84	84	84	,, ,,
TIN-PLATES..Charcoal—IC	p. box	30	30	29	29	29	29	28	28	28	28	28	28	Discount, 3 per cent.
,, IX	,,	36	36	35	35	35	35	34	34	34	34	34	34	,, ,,
Coke—IC	,,	27	27	27	26s 6d	26	25	25	25	25	25	24	24	,, ,,
,, IX	,,	33	33	33	32 6	32	31	31	31	31	31	30	30	,, ,,
LEAD......Sheet	p. ton	19 5 0	19 5 0	19 10 0	19 10 0	19 10 0	19 10 0	19 5 0	19 10 0	19 10 0	19 7 6	19 5 0	19 5 0	Discount, 2½ per cent.
Pig—refined	,,	21 0 0	21 0 0	21 0 0	20 10 0	20 10 0	20 10 0	20 5 0	20 5 0	20 5 0	20 5 0	20 5 0	20 0 0	,, ,,
,, Common	,,	18 10 0	18 15 0	18 15 0	18 15 0	18 15 0	18 15 0	18 10 0	18 10 0	18 10 0	18 10 0	18 0 0	18 0 0	,, ,,
,, Spanish†, in bond	,,	17 18 0	17 10 0	17 10 0	17 10 0	....	....	18 0 0	18 0 0	18 0 0	18 0 0	17 10 0	17 0 0	,, ,,
SPELTER ..Cake	,,	19 15 0	22 15 0	21 15 0	21 0 0	21 0 0	20 0 0	20 0 0	19 17 6	19 0 0	18 15 0	17 15 0	18 5 0	Net.
ZINC ......Sheet	,,	28 0 0	28 0 0	28 0 0	27 0 0	27 0 0	27 0 0	27 0 0	27 0 0	27 0 0	27 0 0	27 0 0	27 0 0	Discount, 1½ per cent.
QUICKSILVER	p. lb.	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	4s 6d	Discount, 1½ per cent.
STOCK OF FOREIGN SPELTER	Tons	2400	2230	1850	1550	1170	1240	1800	2430	2900	3010	2900	2235	
DITTO DITTO TIN	,,	210	135	87	269	211	303	409	495	480	401	515	491	

* Russian, CCND, PSI, and Gourieff—none. † American—none.

[FROM OUR CORRESPONDENTS.]

IRON (Welsh) continues dull; the anticipated reduction on Staffordshire of 2*l.* per ton was decided at Birmingham yesterday; but most of the men being out on strike, very few masters will book orders at the new rates. In Scotch pig rather more doing, and price is looking up. Of spelter, no sales on the spot reported this week, but some has been sold for spring shipment, at 19*l.* 5s.—Other metals remain, with scarcely an exception, at the quotations in last week's *Mining Journal*, with very little doing.

GLASGOW, JAN. 13.—There has been an increased demand for pig-iron this week. There are a number of buyers in the market for spring delivery, and the makers have booked orders to some extent in that way, at 50s. per ton. A fair business has also been done at 47s. to 48s.—cash, for mixed Nos., present delivery. Holders are very firm to-day, and are asking higher rates: they quote 48s. for mixed Nos., and 49s. for No. 1—cash.

BIRMINGHAM, JAN. 13.—The third of the public quarterly meetings of the ironmasters for the current quarter, has been held here to-day. In one respect at least it contrasted in a remarkable manner with the meeting at Wolverhampton yesterday; that was in the very large attendance here of those interested. In the matter of business, however, nothing was done. Buyers do not care to order at present rates, and the ironmasters themselves are careless about receiving orders, seeing that they are not in a condition to execute them. Every particle of information which I communicated in my report from Wolverhampton, received confirmation at the meeting to-day; it is proper to add, however, that there is some difference of opinion amongst those whose experience and extensive concerns render their opinions the most valuable as to the probability of the price of iron touching a lower figure. Some of them are far from confident that it will not do so, especially if the men were soon to return to their work, an event which is, seemingly, not very probable; so that after all it will most likely be found that my prediction of yesterday approaches the nearest to the truth—that the iron trade has received its greatest shock. The largest makers are unanimous in the report that there never was, within their memory, a greater dearth of orders for iron, for all purposes, than there has been during the last three weeks; nobody is disposed to order a ton for which there is not immediate and absolute need. It is not merely that orders for rails have ceased to flow in, but those who make comparatively a small quantity of these have felt equally the depression. For the general purposes of railway, large quantities of iron are necessarily required, but of late the companies have altogether abstained from ordering. As a proof of this, I may cite the fact (vouched for on the best authority), that a well-known and extensive producer of the commodity, who has usually orders on his books for many hundreds of tons of iron for the purpose just referred to, has not now, nor has he for some time had, orders for so many hundredweights. The scarcity of money operates, too, in in a fearful degree, to increase the difficulties, and aggravate the effects, of the depression. Dealing in facts only, I may cite this one, with the view to show how little the money pressure has been alleviated hereabouts: it is the remarkable instance, that ironmasters, in the highest credit, have to-day been charged 6 per cent. for discounting the best bills. It need scarcely be added, in how much greater degree these high rates affect those whose capital and credit afford them less consideration. The nominal prices declared yesterday were not at this meeting disputed, but never, on any occasion, was there less iron sold at current figures. The strike amongst the men spreads rather than decreases, the reduction of wages which the masters have sought to enforce has been to the puddlers about 15 per cent., and to the mill-men and others (whose pay has been pushed up extravagantly in the midst of the prosperity and high prices) from 20 to 25 per cent. There can be little doubt but that the men will be compelled to yield so soon as their trade fund is exhausted, and the shopkeepers refuse any longer to give them credit for the means of subsistence for themselves and their families. The coal trade has suffered, as may be expected, in consequence of the depression in the sister branch: the masters declare their inability to pay to the colliers the present rate of wages, but as yet no reduction has taken place. There can be no doubt, however, that, were it attempted, would strike too. At the present moment the thick-coal men are kept working at from half to three-quarter time; but with three parts of the works of the district standing still, it is quite clear that this cannot last much longer, and a reduction in the colliers wages is apparently inevitable. The final meeting of the ironmasters takes place at Dudley on Saturday evening; but there is no probability that anything of more importance will take place than that which I have already set forth.—*Correspondent of Daily News.*

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	7	10
512	Albert Consols	1	2¼
1024	Alfred Consols	4¼	30
256	Alternum Consols	2	15
235	Andrew and Nangilea	28½	11½
10000	Ayrshire Iron Company	5	1¾
1624	Balleswidden	9	18
128	Balnoon Consols	25	25
10000	Banwen Iron Co.	2	—
1000	Barristown	4½	10
4000	Bedford	2¼	3½-¾
128	Besore Lead Mine	14	10
315	Birch Tor Tin Mine	24½	—
8000	Blaenavon	50	23
100	Botallack	175	80
120	Brewer	5	7
10000	British Iron, New, regis.	10	11-11½
—	Ditto ditto, scrip	10	12
128	Budnick Consols	52½	40
128	Burthy	20	21
100	Bwlch Cwmerlin	20	—
128	Callestock	17	30
1000	Callington	19	32
20000	Cameron's Steam Coal	4	3¾-¼
256	Caradon Copper Mine	9½	1
256	Caradon Mines	22½	17
256	Caradon United	24	5
256	Caradon Wh. Hooper	21	12
1000	Carn Brea	15	105
2048	Cascade	1	2
112	Charlestown	220	30
166	Cleveland	9	5
512	Coatlithe Hill	¼	2
1900	Combmartin	7½	3
500	Comblawn	5½	6
128	Comfort	45	90
256	Condurrow	20	30-2
2560	Cook's Kitchen	14	2
2048	Coombe Tin Mine	4½	2
1000	Coombe Valley Quarry	2	3
1000	Copper Bottom	1	1
1024	Cosheen	4½	20
240	Craddock Moor	15½	15
128	Creeg Braws	120	100
500	Cubert Mine	12½	15
2048	Dartmoor Consols	2	2
300	D. Prior & Buckfastleigh	14	26
7500	Demelza Mines	2	2
7100	Derwent	8½	5
1024	Devon & Courtenay Con.	7½	2
1024	Devon Great Consols	1	210-15
1000	Dhurode	2	5
186	Dolcoath	30	50
2560	Drake Walls	4	4
10000	Durham County Coal	45	9
3000	Dyfngwm	10	12½
256	East Alvenney	10	25
112	East Caradon	42	42
2048	East Crowndale	5½	5
512	East Combe Silver-Lead	6½	6½
128	East Pool	5	20
100	East Relistian	22	40
—	East Wheal Albert	1	3
94	East Wheal Crofty	125	280
256	East Wheal Fortune	2	3
128	East Wheal Rose	50	1200
2048	East Wh. Rough Tor	¼	2
—	East of Scotland Iron Co.	2½	¼
123	East Wheal Seton	14	15
256	Elborough	1¼	2
256	Exmoor Wh. Eliza	3½	6
512	Fowey Consols	40	45
6400	Gadair	2	2
20000	Galvanised Iron Co.	10	9¾
10000	Gen. Mining Co. for Irel.	2	1½
2048	Georgia Tin Mines	1¾	1¾
256	Gonamena	31½	45
128	Goonvrea	4	1¼
244½	Grambler & St. Aubyn	—	10
100	Great Consols	1000	400
256	Great Callestick Moors	22	25
2560	Great Michell Consols	1¼	3½
256	Great Resugga Moor	7	6
512	Gt. Wh. Rough Tor Con.	13½	25
100	Grogwinion	5	—
256	Gwinear Consols	7	20
1000	Harrowbarrow Old Mine	8½	2
6000	Heignston Down Con.	¼	2¾
256	Herodscombe	4½	4¼
256	Herodsfoot	16	18½
10000	Hibernian	12½	1¾
239	Hobb's Hill	6	3
1000	Holmbush	19	11
827	Kirkcudbrightshire	5½	6
2048	Lamherooe Wh. Maria	11	4
128	Lelant Consols	90	60
160	Levant	—	90
1000	Lewis	15	6½
1000	Llwyn Malees	5	—
3600	Llynvi Iron	50	50
256	Lostwithiel Consols	15	15
6000	Marke Valley	10	3
5000	Mendip Hills	2½	1½
5000	Merionethshire Slate & Slate Slab Co.	1½	2
20000	Mining Co. of Ireland	7	6½
256	New East Crowndale	3¾	3½
128	North Fowey Consols	30	30
100	North Pool	45	370
70	North Roskear	10½	310
256	North Wh. Abraham	1	1
262	North Wh. Leisure	1½	2
128	North Wh. Providence	2½	3
15000	Northern Coal Co.	23	2
128	Par Consols	900	1000
4000	Pennant	1½	2½
100	Penrhiw	30	65
1280	Perran St. George Un.	13	20
128	Perran Wh. Virgin	9½	15
512	Plymouth Wh. Yeoland	4½	21
256	Polsaith Consols	4½	7
112	Providence Mines	35	45
10000	Rhymney Iron	50	20
10000	Ditto New	7	6¾
256	Rose Consols	10	2
1000	Rosewall Hill	1	5
256	Rosewarva Mines	—	12
—	Shotts Iron Company	50	55
2500	Silver Valley	5	2
1100	South Dolcoath	3	2½
128	South Caradon	10	450

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
256	Sth. Friendsh. Wh. Ann	16	25
200	South Harvannah	10	25
256	South Tolgus	7½	40
256	South Trelawney	20	8½
128	South Yeoland	16½	20
128	South Wheal Basset	110	95
256	South Wh. Betsey	2½	5
124	South Wh. Francis	160	200
256	South Wh. Hope	—	5
1000	South Wh. Maria	2½	2
256	South Wheal Rose	11¼	1
256	South Wh. Sophia	4	4½
10000	Southern & Western, Irish	2	4
280	Spearne Moor	30	40
256	St. Austell Consols	9	10
94	St. Ives Consols	—	320
128	St. Michael Penkivel	5	10½
1000	Stray Park	43	20
9600	Tamar Consols	3	4
1024	Tavy Consols	4	8
6000	Tincroft	7	8
1000	Tin Vale	2	2
128	Tokenbury	143½	10
256	Trehane	2	24-5
5000	Treleigh Consols	6	3½-¾
2000	Trenance	2	50
96	Tresavean	10	250
120	Trethellan	5	16
120	Treviskey and Barrier	130	135
288	Trevean	1½	25
128	Trewellard	12	26½
100	United Mines	300	350
256	Wellington Mines	15	30
128	West Basset	45	39
256	West Caradon	20	120
128	West Cargoll	2	12
512	West Fowey Consols	40	15
256	West Providence	9	25
200	West Seton	40	150
—	West of Scotland Iron Co.	210	210
120	West Trethellan	5	35
256	West United Hills	6½	1
256	West Wh. Friendship	9	12
3845	West Wheal Jewel	11	1½
2560	West Wh. Maria	2½	1½
2560	West Wheal Rough Tor	¼	2
256	West Wheal Shepherd	5	2½
256	West Wheal Tolgus	21½	5
256	West Wheal Treasury	19	10
5200	Wicklow Copper	5	11½
184	Wheal Adams	51	10
1000	Wheal Agar	—	10
256	Wheal Albert	10	8
128	Wheal Acland	13	2
256	Wheal Allen	2	5
237	Wheal Anderton	18	25
128	Wheal Ann	—	50½
512	Wheal Ann, Bridford	1	2
512	Wheal Anna Maria	—	5
1024	Wheal Ash	4½	8
120	Wheal Bal	5½	20
2560	Wheal Barbara	1¼	4-5
256	Wheal Benny	10½	6
256	Wheal Blencowe	21	8
256	Wheal Bucketts	20	5
256	Wheal Calstock	3	4
136	Wheal Clifford	190	190
1024	Wheal Coad	¼	1
128	Wheal Courtenay	—	20
6000	Wheal Curtis	2½	3-3½
256	Wheal Dyke	12	13
256	Wheal Fortescue	6½	5
512	Wheal Fortune Consols	3½	6½
2048	Wheal Frederick	2	2
388	Wheal Franco	27	28
128	Wheal Harriet	45	50
256	Wheal Jane	21	15
256	Wheal Louisa	8½	8
112	Wheal Margaret	79	250
512	Wheal Mary Ann	5	17
256	Wheal Mary Consols	38	25
210	Wheal Prospect	4	7
120	Wheal Reeth	27	80
128	Wheal Rose	60	45
2048	Wheal Samson	¼	20
99	Wheal Seton	214	1100
256	Wheal Sisters	29½	20
256	Wheal Sophia	5½	10
128	Wheal Spearne	10	75
128	Wheal St. Ann	9	15
260	Wheal Trelawney	7¾	95
256	Wh. Tremaine (St. Ervan)	4½	20
256	Wheal Tremayne	35	25
128	Wheal Trew	20	21
256	Wheal Trevenna	3	4
92	Wheal Tryphena	140	265
128	Wheal Venland	13½	4
256	Wheal Vlow (Perranz.)	¾	4
184	Wheal Vyvyan	—	60
256	Wheal Williams	6	12

FOREIGN MINES.

Shares.	Company.	Paid.	Price.
5000	Alten Mining Company	14½	3½-¾
15000	Asturian Mining Co.	11	3¾
20000	Australian	2½	3½-¾
10000	Anglo-Mexican Co.	100	2
12374	Ditto Subscription	25	2¼
6000	Barossa Range	¾	2¼
3000	Bolanos	150	3¼
2000	Ditto Scrip	15	3¾
12000	Brazilian Imperial	23	7
10000	Cobre Copper Co.	40	18
8500	Colombian Co. regis.	55 }	1
5000	Ditto Scrip	5¼ }	
5000	Copiapo Mining Co.	14	2¼
10000	General Mining Ass'n.	20	13¾
5000	Kinzigthal Mining Ass.	2	5-6
20051	Mexican Company	59	—
2000	Mexican & South Amer.	7	1¾
5000	Mocaubas & Cocaes	30	6
29320	{ Rl. del Monte, regis. / Ditto unregistered }	28¾	1¾
	Ditto Red Debentures	—	10
	Ditto Black ditto	—	8
	Ditto Loan Notes	150	60
7000	Royal Santiago	10	6
2000	Pachuca Mines	4	4½
11000	St. John del Rey	15	6½-¾
43174	United Mexican ... Av.	28½	1½

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

MISCELLANEOUS COMPANIES.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
10,000	Assam Tea Company	£20	—	£ 3
1,080	Auction Mart	—	£ ½	28
10,000	Australian Agricultural	30	1	22
10,000	Australian Trust	35	—	30
8,000	British Alkali	25	4	16¾
10,000	British American Land	35½	—	14
8,600	British Rock and Patent Salt	35	18	11
9,915	Canada	32½	6	30½
—	City Bonds (Navigation)	—	3½	89
1,800	Corn Exchange	37½	1½	26½
5,000	Droitwich Patent Salt	25	¾*	11
2,700	Equitable Reversionary	95	4½	90
—	General Reversionary Interest	100	5	100 105
0,000	General Steam Navigation	14	1¾*	23¾
—	Hudson's Bay Stock	—	10	230 240
2,100	Hungerford Market	100	¾	—
1,500	London Commercial Sale Rooms	—	1¾	31 32
8,000	London Reversionary	22	—	23 24
300	Margate Pier	—	10	196
10,000	Mexican and South American	7	—	3¾ 4
20,000	New Brunswick	75	—	—
11,600	Peninsular and Oriental Steam	50	7	59½
6,600	Ditto	40	—	—
5,387	Reversionary Interest Society	100	4½*	97
—	Royal Mail Steam	—	5¾	48½ 50
8,000	South Australian	25	6	—
20,000	Upper Canada	100	5	93 94
20,000	Ditto	—	5	93 94
10,000	Van Diemen's Land	20	—	2

JOINT-STOCK BANKS.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
22,500	Australasia	£40	£3	£15
20,000	British North American	50	5	44 45
20,000	Colonial	25	5	14½
—	Commercial of London	20	6	22 23
4,000	Ionian State	25	6	24½ 25
60,000	London Joint-Stock	10	6	15½
30,000	London and Westminster	20	6	23¾
10,000	National Provincial of England	35	5	36
20,000	National of Ireland	22½	5	19¾ 19¾
20,000	Provincial of Ireland	25	8	40 42
4,000	Ditto New	10	8	15¾
20,000	Union of Australia	25	6	24 25
10,000	Ditto New	2½	6	2½ 2½
60,000	Union of London	10	5	10¾

IMPROVEMENTS IN THE STEAM-ENGINE.—A patent has been secured by Mr. Aiken, of Bermondsey, for several improvements in the steam-engine. The first is to obtain power in the act of supplying the condensing water to the condenser—it consists in the employment of an additional cylinder and piston, of sufficient capacity to contain the quantity of water required to be thrown into the condenser at one time. This additional cylinder gives power to the steam-engine, in ordinary cases, equal to the discharge of the air-pump, and also improves the vacuum in the condenser, by extracting air from the water on its way there. The second improvement consists in establishing a communication between the condenser and the upper part of the air-pump by a tube, with a valve in it, termed a vacuum tube, by the action of which the vacuum is further improved. The third improvement consists in the application to marine engines, of what the patentee calls a "propulsion tube," being a continuation of the discharge-pipe of the air-pump turned downwards, into the water in which the latter floats, and bent horizontally towards the stem—so that the power, hitherto employed in discharging the water from the air-pump into the atmosphere, will be directed against the water in which the vessel floats, and thus assist in the propulsion of the vessel. The fourth improvement consists in employing the eduction steam from a non-condensing engine, to work a rotary engine, which is to be placed on the eduction pipe of the former, or upon the chimney, if applied to a locomotive engine. A further improvement has for its object the saving of power employed for raising water, which the patentee calls an "equilibrium pump." It consists of a cylinder and piston, with suction pipe affixed to a steam-engine, the action of which is as follows:—The engine raises the piston of the pump, and the water ascends by atmospheric pressure; a valve on the pipe leading to the hot well opens, and also one on the cold water cistern—the hot water enters the pump under pressure of the atmosphere, and is equal to the discharge of cold water, less the friction, which is thus the only working power required.

TO BE SOLD, BY PRIVATE TREATY, FOUR (32nds) SHARES (the whole into 32 shares, being divided) in that well-known and long-established LEAD MINE, now in full operation, called the HOLYWELL LEVEL MINE, situate near the town of Holywell, in the county of Flint. A powerful steam-engine stands on the Mine, and an excellent level, for unwatering the land, has been driven a long distance, and altogether the Mine is worked on a large scale. A valuable discovery has recently been made, and which, when fully worked, must yield a large quantity of ore, and prove a source of great profit. The company carrying on the Mine is a highly respectable one. Satisfactory reasons given for the disposal of the present shares.

For all further particulars, address "W. W.," care of the Editor of the *Mining Journal*, 26, Fleet-street, London.

COPPER ORES.

Sampled Dec. 29, and Sold at Andrew's Hotel, Redruth, Jan. 13, 1848.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
Carn Brea	96	£3 8 6	Wh. Prosper	35	£1 10 0
ditto	94	9 16 0	Wh. Friendship	5	3 12 6
ditto	92	7 14 0	Alfred Consols	66	2 4 0
ditto	90	5 6 0	ditto	54	2 11 6
ditto	80	6 4 0	ditto	46	1 19 0
ditto	74	4 13 6	ditto	33	6 6 6
ditto	67	8 17 0	Levant	55	6 17 0
ditto	65	9 16 0	ditto	50	7 6 0
ditto	64	4 16 6	ditto	39	4 9 0
ditto	63	4 19 6	ditto	35	4 15 0
ditto	47	11 8 0	West Wh. Treasury	56	6 15 0
ditto	41	1 7 0	ditto	52	5 16 0
ditto	37	11 15 0	ditto	31	5 2 0
Par Consols	112	8 4 6	North Wh. Basset	30	6 17 0
ditto	94	5 18 6	ditto	29	3 11 6
ditto	78	9 18 6	Wh. Agar	53	4 12 6
ditto	59	7 6 0	Wh. Gurlyn	39	5 16 6
Wh. Prosper	74	4 9 6	ditto	8	2 13 0
ditto	62	3 15 6	Wh. Tremayne	44	3 17 6
ditto	48	4 2 6	Providence Mines	32	1 5 6
ditto	42	3 10 6	Wh. Vor	8	5 6 6

TOTAL PRODUCE.

Carn Brea	910	£6155 8 6	North Wh. Basset	59	£ 309 3 6
Par Consols	343	2683 0 0	Wh. Agar	53	245 2 6
Wh. Prosper } Wh. Friendship }	266	981 17 6	Wh. Gurlyn	47	248 7 6
			Wh. Tremayne	44	170 10 0
Alfred Consols	199	582 13 6	Providence Mines	32	40 16 0
Levant	179	1081 11 0	Wh. Vor	8	42 12 0
West Wh. Treasury	139	837 14 0			

Average Standard..........£ 94 6 0 | Average Produce 9¾

Average Price per ton £5 17 0

Quantity of Ore .... 2279 tons. | Quantity of Fine Copper, 208 tons 7 cwts.

Amount of Money £13,378 16 0

LAST SALE.—Average Standard..........£ 99 1 0.—Average Produce 9¾

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	136	£641 8 0
Vivian and Sons	553	3687 14 0
Freeman and Co.	303	1565 11 0
P. Grenfell and Sons	383	1650 17 0
Crown Copper Company	26	122 11 3
Sims, Willyams, and Co.	254	1317 18 6
Williams, Foster, and Co.	619	4392 16 3
Total tons	2279	£13,378 16 0

Copper ores for sale on Thursday next, at Pearce's Hotel, Truro.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria, 1341—Poldice 240—Fowey Consols 240—West Caradon 237—Wheal Friendship 221—Wheal Jewel 168—Bedford United Mines 115—Wheal Maiden 41—Gonamena 35—Penpoll Co's Regulus 24—Point Regulus 18—Tamar Slag 13.—Total, 2693 tons.

Copper ores for sale on Thursday week, at Pearce's Hotel, Truro.—Mines and Parcels.—Consols Mines 762—United Mines 586—Tresavean 378—South Caradon 365—Treviskey 310—Perran St. George 309—Par Consols 307—Wheal Comfort 240—Grambler and St. Aubyn 175—Trethellan 166—Wheal Sisters 126—Treleigh Consols 113—Wheal Ellen 107—Wheal Andrew and Nangiles 78—Barrier 71—Wheal Clifford 56—Charlestown United Mines 30—Budnick 22.—Total, 4210 tons.

LEAD ORES

Sold in London.

Mines.	*Tons.*	*Amount.*	*Purchasers.*
Wheal Adams	30	£8 0 0	R. Michell & Son.
Sold on the Mine.			
East Wheal Rose	81	£12 0 6	J. T. Treffry.
ditto	65	11 12 6	Newton, Keates, & Co.
ditto	35	11 7 0	ditto
Total tons	181		
Sold at Liskeard.			
Wheal Trelawney	72	£14 14 0	Walker, Parker, & Co.
Sold at Bagilt.			
Peel	110	£10 6 0	Newton, Keates, & Co.

BLACK TIN.

Mine.	*Tons.*	*Price per ton.*	*Purchasers.*
Birch Tor	8½	£42 5 0	Calenick Co. and Williams.

COPPER ORES

The following was omitted in last week's Journal, at the SWANSEA SALE of the 6th inst.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
English Copper Company	108	£3643 2 0
Freeman and Co.	56	1281 0 0
P. Grenfell and Sons	194	3673 12 0
Sims, Willyams, and Co.	222	3654 11 0
Vivian and Sons	448	5979 0 0
Williams, Foster, and Co.	464	10283 10 0
Schneider and Co.	116	1828 0 0
Total tons	1608	£30,542 15 0

Copper Ores for Sale January 27.—Cobre 122, ditto 117, ditto 110, ditto 87, ditto 86, ditto 74, ditto 14, ditto 28, ditto 5, ditto 25.—Chili 57, ditto 55, ditto 53, ditto 51, ditto 50, ditto 48, ditto 46, ditto 25, ditto 84.—Holyford 66, ditto 56.—Burra Burra 60, ditto 87.—Lackamore 54, ditto 7.—Chili 52.—Colombia 12.—Princess Royal 11.—Australian 9=1531 tons.

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars ....per oz.	£3 17 9	New dollars ....per oz.	£0 4 9½
,, Portugal pieces....	0 0 0	Silver in bars (standard)	0 4 11¾

NOTICES TO CORRESPONDENTS.

It will at all times save much trouble, and frequently considerable delay, if communications are simply directed—

To the Editor,
Mining Journal Office,
26, Fleet-street, London.

Also, to avoid trouble, Post-Office Orders should always be made payable to William Salmon Mansell, as acting for the proprietors.

*** We should feel obliged to all pursers, captains, or adventurers, to forward particulars of meetings, &c., of the mines with which they may be connected, on the earliest opportunity, that they may be published in the Journal with as little delay as possible.

"Anti-Cornishman" will find the information he requires in another column of this day's Journal.

"T. R." (Bath).—The Journal can be obtained of any local bookseller or newsman.

"A Subscriber" (Redruth).—The letter cannot appear without the writer's name being known to us—What guarantee have we of the statements made being correct?

"M." (Launceston).—Address the secretary, at the offices of the company, Winchester-house, Old Broad-street.

"G. A." (Paris).—The Carwinning Hill Mine has been noticed in most of our late Nos.

The Godwin Sands.—The letter addressed to "Terro-Nauticus" has been received, but much of its contents are so evidently fallacious, as to render its further notice unnecessary.

We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses; not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

The Mining Journal is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

Glossary of Mining Terms.

During the present month, we intend publishing, as a Supplement, an Entire Glossary of English and Foreign Mining Terms.—Subscribers and others wishing for copies of the Number, had better forward their orders, through their agents, to prevent disappointment: the charge for the Journal and Supplement will be Sixpence.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JANUARY 15, 1848.

Having been applied to by several correspondents for a return, showing the difference in the produce of British and Foreign copper ores, for the last few years, we have carefully gone through the whole series of Ticketing Papers for the last four years, as well as our own quarterly summaries, and now present the results—in a form which, we think, will meet the inquiries of several communications, made in different ways. The following annual return of the quantity of British and Foreign copper ore sold by public ticketings at Swansea and in Cornwall, will answer the inquiry of one of our correspondents, received during the week:—

Yrs.	Cornwall.		Foreign.	
1844	*Tons* 152,969	£801,434 4 6	*Tons* 45,240	£744,909 12 6
1845	„ 162,557	919,934 6 0	„ 44,836	626,758 2 6
	„ 315,526	£1,721,368 10 6	„ 90,076	£1,371,667 15 0
1846	„ 144,430	£796,192 6 6	„ 45,394	£649,474 9 0
1847	„ 153,120	873,436 10 0	„ 34,818	562,102 4 6
	„ 297,550	£1,669,628 16 6	„ 80,212	£1,211,576 13 6

Thus showing a considerable decrease in the general ore produce of the last two years, as compared with the preceding—in Cornish, 17,976 tons, and in money 51,739*l.* 14s.; and in foreign, 9864 tons, and money 160,091*l.* 1s. 6d. It will also be seen from the above, that, while the amount of foreign ores sold in 1847 shows a decrease, as compared with 1846, of 10,576 tons, and 87,372*l.* 4s. 6d., in Cornish ores there has been an increase of 8690 tons, and money 77,244*l.* 3s. 6d. The quarterly amount of the Cornish sales, for the last four years, has been as follows—viz.:

Quarter ending March 31, 1844	*Tons* 39,874	£219,019	3 0
„ „ June 30, „	37,306	188,721	8 0
„ „ Sept. 30, „	38,073	195,626	17 6
„ „ Dec. 31, „	37,716	198,066	16 0
Total	*Tons* 152,969	£801,434	4 6
Quarter ending March 31, 1845	*Tons* 40,367	£215,284	3 0
„ „ June 30, „	40,844	226,373	3 0
„ „ Sept. 30, „	42,420	250,257	1 6
„ „ Dec. 31, „	38,926	228,019	18 6
Total	*Tons* 162,557	£919,934	6 0
Quarter ending March 31, 1846	39,335	£207,697	10 0
„ „ June 30, „	32,232	200,810	11 6
„ „ Sept. 30, „	37,784	196,486	16 0
„ „ Dec. 31, „	35,079	191,197	9 0
Total	*Tons* 144,430	£796,192	6 6
Quarter ending March 31, 1847	*Tons* 38,071	£222,542	9 0
„ „ June 30, „	34,878	204,662	4 6
„ „ Sept. 30, „	40,174	229,969	2 6
„ „ Dec. 31, „	40,000	216,262	14 0
Total	*Tons* 153,120	£873,436	10 0

The quarterly sales of foreign ores, for the last two years, were as follows—viz.:

Quarter ending March 31, 1846	*Tons* 14,714	£192,338	11 0
„ „ June 30, „	10,209	139,243	16 0
„ „ Sept. 30, „	10,926	164,269	19 6
„ „ Dec. 31, „	9,545	153,622	2 6
Total	*Tons* 45,394	£649,474	9 0
Quarter ending March 31, 1847	*Tons* 6,820	£109,093	19 0
„ „ June 30, „	7,656	123,776	9 0
„ „ Sept. 30, „	10,774	188,119	19 6
„ „ Dec. 31, „	9,568	141,111	17 0
Total	*Tons* 34,818	£562,102	4 6

Thus, the first quarter of 1846 is the highest of any succeeding quarter—that ending Sept. 30, 1847, being the next, but about 4000*l.* short—and showing a decrease in the latter year of 87,372*l.* 4s. 6d.

The revenue accounts for the last quarter, and for the current year, have been now some days before the public. Although the deficiency upon the last twelve months of commercial vicissitude and suffering is sufficiently serious, yet, upon being looked into, it does not present any formidable features of discouragement, but rather infuses surprise, that the defalcation is not greater. The total revenue paid into the Imperial Treasury between the Januarys of 1847 and 1848, is a little over 2,000,000*l.* sterling less than was paid during the preceding financial year; but then, in 1846, the income was swollen by the receipt of a large part of the Chinese ransom, and by payments in advance, together amounting to fully 1,000,000*l.* Neither of these, strictly speaking, were items of revenue, but incidental contributions, by which the income of the period was run up to a higher point than the actual earnings of the year could have carried it. In addition to which, it is known to all the world, that the severe scarcity of 1847 prevented the malting of a large quantity of grain, which, upon receiving that treatment, would have sent a large sum of money into the public Exchequer. Again, the public income of 1846 was liberally fed by the duty on imported corn; whilst the year, whose accounts are just closed, received not a single shilling from that ordinarily productive source. If a 5*s.* duty had been leviable, as heretofore, on foreign corn, and the importation of 1848 had been but one-fourth of what it actually was, the revenue flowing from that single article would have largely overbalanced the gross deficiency on all the other branches of the year's revenue. This loss to the Exchequer is so much clear gain to the public, who has, undoubtedly, paid in the cheapened price of staple articles of consumption—viz., in corn and porter—some millions less than must have been paid under the preceding tariff, and from which the relaxed law of 1848 most seasonably relieved them. We state these facts, and their consequences, thus fully, because we think it important, as showing that the industrial classes of the kingdom have not abated in their characteristic diligence and activity, nor the general trade of the community fallen in its productiveness, notwithstanding the heavy commercial embarrassments by which we were overtaken.

We are happy to notice, in several directions, highly-promising indications of a revived demand for the metallic produce of the kingdom. We sadly misconstrue all the signs connected with the subject; our mining almanac is extensively in error, if we are not on the threshold of a material advance in the prices of iron, copper, and tin. A little time certainly will either confirm, or disappoint, our expectations; but in the favourable turn of the scales, we have at present every confidence. We have great pleasure also in noticing the greater facility with which money, in a large way, is now procurable; the greatest discount now asked is 4 per cent.—and there is little doubt, from the abundance of the precious metals now on hand, that the present moderate price of money will not be maintained. This is our public condition—a revenue shaken but rallying—the operative classes digilent in their industry, and in general enjoying its natural fruits—the prospect of an improved demand for much of our produce, and particularly for that of mining—money flowing into all necessary channels, for the refreshment of every branch of legitimate business, and the public funds steadily going up. It is not our purpose to sprinkle the uncertain future with more lights than, in all human probability, will be found to spring upon it; but the pencils are numerous enough, which are occupied in giving a false prominency to the clouds and shadows, which may, by possibility, intervene before that period.

The iron trade in all parts of the United Kingdom is, at the present moment, in a more depressed state than at any previous period which has happened throughout the last few years—so remarkable for fluctuation in the demand and supply of this most important staple produce of Great Britain—indeed, it is not, we believe, in the remembrance of the oldest in the trade when such stagnation existed. The true state of the case will be at once understood, on the perusal of our notices of the meetings of ironmasters, inserted in another column, with the number of furnaces in and out of blast, the accounts from Scotland, &c. Some idea may be formed of the extraordinary nature of this crisis, from the fact stated on authority, that a well-known and extensive ironmaster, who has of late years continually had orders on his books for many hundred tons of iron for railway purposes, has not, for a number of weeks, had orders for as many hundred weights. This depression of the iron trade may be, doubtless, traced as the effect of two concurring causes—one, the great general monetary crisis existing during the past six months; and the other (resulting from it), the cessation of all works on a large portion of railway construction—thereby suddenly stopping the circulation of many thousands of pounds weekly; which, as it is the very life-blood of trade and commerce, it is no wonder that so sudden a cessation should end in paralysis.

Notwithstanding the serious aspect of affairs, however, we trust that there are brighter prospects in view. It is true, there is at present a very limited demand, but stocks are low all over the kingdom; and, on the very first appearance of activity, by the railway companies resuming operations, great exertions will have to be made to meet the growing demand—a demand which must shortly arise for shipbuilding, agricultural, and other purposes, for which iron *must* be had. We think there is reason to hope that, as the spring advances, a great change for the better will take place; there is growing confidence in the money market—a complete restoration of which will make all things right; the funds are rising, and every appearance in the commercial horizon, betokens a speedy reaction, and future activity and success.

We are glad to see the masters firm in their decision of a reduction of wages under present circumstances—for, although it will be severely felt for the time by the operatives, it is but just that they should share in the depression, as they did in the great increase in trade two-and-a-half years ago, since which they have been receiving wages equal, or even superior, to mechanical operatives; and establishments, with a command of ever so much capital, paying as much for the raw material, as they can get for the manufactured article, must soon fall in one common ruin. It must not, however, be for a moment supposed, that the immense unhealthy and unequalled activity in the iron trade, brought about by railway demand in 1844-45, will ever be again resumed, or equalled; but we hope again to see that firm and steady demand arise, which, while it will give continuous employment to the population in the iron districts, will not induce those gambling fluctuations in prices, which have ever proved so injurious to this great and important interest. The final meeting of the ironmasters will take place this evening, but nothing further of importance is expected to take place.

We have inserted, in another column, as promised in our last Number, the report of the directors of the Mining Company of Ireland, submitted at the half-yearly meeting, held on the 30th of December last. Notwithstanding the report in its general features is more favourable than that at the previous half-yearly meetting, the actual profit is less—being under 400*l.*—and, consequently, a year has now elapsed since the directors have had it in their power to make a dividend; but great hopes were held out that a much more prosperous state of things would speedily ensue. The great decrease in the sale of coals by the company (previous to the potatoe blight, largely consumed in burning lime for manure), is another melancholy proof of the wretched state of this unhappy and distracted country. The chairman, however, lest their prospects should appear more gloomy than they really were, called attention to the fact, that a sum had already been paid to the shareholders in dividends exceeding the whole of the capital raised—that their mineral property was worth 190,000*l.*, and their convertible assets exceeded 50,000*l.* more—of which 28,000*l.* was unsold coal and metallic mineral. He considered the future working of the mines would be profitable, and the prospects fully justified such opinion. Sir R. Kane also remarked on the more favourable nature of their prospects—the opening of the coal mine at Earl's Hill at remunerative prices; and the appearances at Knockmahon, would, he hoped, put a new face upon the company's affairs. With respect to the heavy royalty exacted at the Knockmahon Copper Mines, we are glad to announce that a bill (as stated by the chairman) has been prepared and submitted to the law officer of Government, with the hope of its being introduced as a Government measure; and, if not brought forward in such manner, that the directors are prepared to take steps for its early introduction next session. We have, on several occasions, commented on the absurdity of allowing an old Act of the Irish Parliament to remain in full force, by which so much injury is done to mining property, as that of not allowing guardians of minors and lunatics and holders of ecclesiastical property to make the best terms they can for its effectual working, and keeping up so exorbitant a charge, as to deter adventurers from embarking in mining enterprise. The Act in question thus commits a double injury, lessening the incomes of the holders, and preventing the employment and support of thousands of the starving population—it being generally known that the mineral riches of Ireland would be most extensively worked, were greater facilities offered, and better encouragement held out, to adventurers with capital—while, we believe, there is scarce a landlord in Ireland who would not feel the passing of such an Act as a boon, and would be willing and ready to grant setts on terms which, while they were just and equitable between owner and adventurer, would undoubtedly confer one of the greatest blessings on society, by aiding in the support of a starving people. Such a bill might be got through Parliament, and receive the Royal assent, in a few weeks; and, as we have before remarked, we think there is not a Member of either House who would make the slightest objection to the matter.

It may be confidently expected, that the time is by no means distant when a permanent beacon will be erected on the Godwin Sands, which, in the fullest and largest sense of the words, will be for "*a light to all nations.*" It is of all things notorious, that a dangerous shoal may be said to lie at the mouth of the richest and most frequented port in the known world; and that it has continued there for centuries in its naked inutility, and unshorn of its natural dangers. From time to time, there have been swallowed up in this Golgotha treasures and lives innumerable, which might, in all likelihood, have been saved to the world and to society, if the ordinary precautions had been taken to warn vessels of their danger, and to direct them out of their distress. It is not for us to form any opinion on the practicability of securely laying a foundation on the chalk below these sands. It is a question wholly for engineers; but if it is not surrounded with hindrances absolutely insuperable, the public importance of the undertaking would justify an immediate interposition on the part of Government. Which of the plans, or if either, suggested by our intelligent correspondents, is best adapted to meet the peculiar difficulties of the case, is a question on which we do not permit ourselves to form an opinion. Their views, as a whole, we take leave to say, are bold and feasible. As a matter of course, all idea of making it a fortified fort—a place of arms—is out of the question. This is one of the works of peace, and to be permanently exempted from the casualties by which the amity of nations is occasionally disturbed. To command the Channel, we do not need a fortified lighthouse, but some half dozen 90-gun ships, running up and down between the Lizard and the Forelands. We may be permitted to say, in passing, that it is not very apparent for what reason the mouth of the Thames is not an armed station. A great navigable river, open to all comers, and leading directly by one steam tide to a rich metropolis, should not continue so undefended. We should have thought that two forts, at the first point at which the river water-way narrowed to a mile in breadth, and then filling the ascending banks with 100 pieces of ordnance, properly placed, well mounted, and well served, would administer an efficient sedative to any foray of hostile war steamers which an enemy might send up for a diversion. At present, we have nothing to stop them with; but these are considerations quite away from a lighthouse on the Godwin Sands; that measure is for the safer navigation of our home seas—for the greater security of the lives of our sea-going population—and for the general convenience of our vast merchant navy. Holding in highest estimation these important and national objects, we entertain a confident hope that an expedient, by which they may be all very materially promoted, will be favourably regarded by a discriminating Government.

Ever anxious to promote the interests of mining, with which are associated those appertaining to the metal trade, we have, at all times, directed attention to subjects, which having been brought before the public in one shape or other, warranted a passing observation or comment; and such an instance presents itself on the present occasion.

We have more than once adverted to a system pursued by certain brokers, or agents, of mining shares, who, not content with the ordinary commission, have assumed the position of principals—or, in other words, while they have taken shares from their clients, on the one hand, at 50*l.* per share, charging them with commission as agents—and, therefore, we contend, bound to do the best they could for the parties so employing them—they have obtained a transfer in blank, and sold the shares to another party, at, perchance, 5*l.* to 10*l.* advance—taking a second commission, or brokerage, and thus plundering both parties. The way in which this is effected, is by obtaining a blank transfer from the vendor; this is filled up, and the name of "Jones, Brown, Smith, or Robinson," inserted as the purchaser. The shares being sold, a second transfer is made, and thus any communication between the parties as the actual sellers and purchasers, is prevented. That this course is too commonly adopted, we would only refer to those we deem respectable agents, to affirm or deny—indeed, it is too notorious to require evidence.

If such be, and undoubtedly is, the case, it is a duty devolving upon us to expose the system; and the present moment appears to be well fitting for effecting such object, inasmuch that the proceedings in the Vice-Chancellor's Court, on Thursday, afford an instance, and, we trust, an example visited as it should be, which will, we think, deter parties from pursuing the system.

It appears, that in the month of June, 1845, a transaction took place with Messrs. Short and Mahony, as metal brokers, for the purchase of 3000 tons of iron, and a broker's, or contract, note was accordingly passed, a deposit of 500*l.* paid, as also the commission on the transaction; thus leading to the natural inference, that Messrs. Short and Mahony were acting in their capacity of brokers, and not as principals, in the transaction. The party, a Mr. Bright, requiring an advance on the contract note, which was at the time deemed of value, from the state of the market, acquired 2000*l.* Certain interviews, or communications, were interchanged, and, in the end, the proceedings referred to were instituted against Messrs. Short and Mahony, for the recovery of the deposit—they having effected the sale under false representations. Sir James Wigram, in giving judgment, observed, that the claim made by the plaintiff, and which appeared to him to be established, clearly resulted from a lawful contract entered into with Bright, and was founded upon the distinct ground of misrepresentation, which the Court—whatever might be its moral character—could only deal with as a fraud; the decree being, that of the payments of the deposits by Messrs. Short and Mahony to the plaintiff, with interest and costs.

The lesson, we trust, will have its desired effect; it will at once establish the law applying to cases of this nature, which we could wish were solitary, but such, unfortunately, is not the case. We should be well pleased if some transactions, connected more immediately with mining, were in like manner brought before the public, and thus exposed; it would clear the market, and, in so doing, give confidence to the capitalist, in the investment of money in mining undertakings.

Contracts for Coals.—It is understood, that in addition to the contract offered by the East India Company to be settled on the 26th inst., for 3000 tons of English coal, to be delivered at Aden, on the coast of Arabia; another is offered for competition, for 500 tons, to be delivered at Point de Galle, in Ceylon; and on the 20th, one is to be taken by the Government of 300 tons. The commissioners for executing the offices of Lord High Admiral, have also given notice that, on the 27th inst., they will be ready to contract with parties willing to supply the ports of Chili and Peru, as may be directed by the Commander-in-Chief, with 1500 tons of anthracite coal, fit for the service of her Majesty's steam-vessel.

It will be seen by the meeting of the Colonial Bank, in another column, that the demon of slavery is again in the ascendant, and encouraged by the rulers of the British Empire!! Is this a result that was looked for by the British people after the expenditure of 20,000,000*l.* of money for its abolition? The slave-owners of Brazil, Cuba, and elsewhere, now flourish through the *liberality* of the British Government; whilst our West India colonists, who *pay wages* for free labour, are being ruined one after another. If this beautiful legislation is not worse than "robbing Peter to pay Paul," we know not what is!

STEAM-BOILER INCRUSTATION.

One of the greatest impediments to the safe and economic use of the steam-engine, to the obtainment of all the power due to well-constructed machinery, and proportionate boiler and furnace, is "incrustation." Many attempts have been made to remedy this evil—such as adding to the water in the boiler, vegetable or animal matter, as potatoes, starch, leather shavings, logwood, sugar, turmeric, &c.; by any of these the adhesion of the earthy matter to the iron is lessened, and the interval between the cleanings protracted—the pulpymatter enveloping the crystals lessens their tendency to adhere, and preserves them for a time suspended in the water. Dr. Clark (of Aberdeen) took out a patent for the use of lime water, in such proportion as exactly to saturate the excess of carbonic acid, and precipitate the original carbonate, and that added—in form of a sediment; but none of these plans are effective. Muriatic acid immediately attacks any carbonate of lime in the water, forming muriate of lime, a soluble salt—thus effectually preventing incrustation; but the use of the free acid endangers the metals of the boiler, valves, &c.

We have, on many former occasions, noticed the plan patented by Dr. Ritterbandt, which has now been in use for nearly two years in the steam-boilers of many of the first establishments in London and elsewhere, in locomotive boilers on railways, and marine engines; and has never been known to fail in most completely preventing the slight appearance of incrustation—while the metal of the boilers, valves, &c., remainedin every case not only perfectly uninjured, but required none of that scaling, hammering, &c., in cleaning, so injurious where incrustation has to be removed. So long since as the 17th of February, 1846, on the reading of a paper by Mr. West, at the Institution of Civil Engineers, "On the Water for Steam-Engine Boilers," Mr. J. V. Gooch, of the London and South-Western Railway, bore testimony to the merits of the invention—numerous experiments which he had tried proving that it not only prevented incrustation, but removed any which might have been previously formed. The first experiments were made on the *Rein Deer* engine, having half old tubes, with $\frac{1}{16}$th of an inch incrustation, and $\frac{1}{8}$th of an inch over the fire-box—the other half of the number of tubes were new. It continued running in the usual manner, being washed out every fourth day; and, at the end of five weeks, every sign of former incrustation had disappeared—the metal was perfectly clean, the boiler carried two inches more water than before, the blast-pipes could be enlarged, and, on analysing the water, not the slightest trace of metal could be found—clearly showing that the boiler and valves were not attacked by the acid or the ammonia. On marine and stationary boilers, also, Mr. Gooch had experimented with equal success. In fact, the success of the application, and the saving of fuel thereby, is universally acknowledged, and yet, strange to say, the process in question has not met with that success which might be expected. Even the Admiralty and other Government engineers acknowledge its efficacy; and Dr. Ritterbandt affirms that, by adopting his plan, a saving of 20,000*l.* per annum would be effected in the fuel employed in the steam navy alone! Surely with this saving, in addition to that of preventing the destruction of the tubes and tube-plates by corrosion, which entails enormous cost, greater efficiency of the engines secured, and much less time devoted to them, the subject is worthy of prompt consideration in the proper quarter.

THE AYRSHIRE IRON COMPANY.

At an adjourned meeting of shareholders, held at the Black Bull Hotel, Glasgow, on Thursday, the 6th inst. —Mr. DRYSDALE in the chair—a report from the directors was read, stating, that a further investigation of the affairs of the company had been made, and it was not considered expedient to carry on business any longer, beyond what might be necessary for the realisation of the property. The creditors had made a favourable proposal, which would enable the company to realise their assets—viz.: that all the debts of the company be equalised—that 10s. in the pound, out of the funds subscribed by the solvent shareholders, be paid down, and the remainder by bills, at six and twelve months. The directors recommended this proposal to the adoption of the meeting; that a special meeting be called for the purpose, and for dissolving and winding up; and also that they should be authorised to suspend all workings, to offer for sale the property, and accept offers, if thought expedient, and settle, by composition, if necessary, all debts due to the company. Many questions were put by the proprietors, as to the reasons for selling the works; and it was explained by the directors and committee, that two gentlemen had inspected the state of the furnaces and the mineral workings, but their report was not yet sufficiently definite to enable the committee to recommend whether to go on or no; they only asked for the necessary authority, and the shareholders might rest assured, that the committee would go on in the business if they could see their way clear, and not make further losses, or deteriorate the value of the property. The report was then adopted.

The shareholders then resolved themselves into a special meeting,—Mr. WATSON in the chair,—who congratulated the meeting that all their proceedings had been given at length in the public papers, as it showed they had nothing to conceal, and that they were not afraid of their affairs coming before the public. The committee had a painful and arduous duty to perform—they had divided themselves into sub-committees; one for finance and getting in subscriptions; another for arranging with parties, with whom the company had not been able to fulfil their contracts; another to inspect the state of the affairs of bankrupt and insolvent shareholders; and another for arranging future proceedings. The finance sub-committee had witnessed much distress; and many of the shareholders were sacrificing their whole means to meet the liabilities of the company. The deeds had, after much legal difficulty, been agreed to, and, in a few days, would be ready for signature by the shareholders. They had a most responsible duty to perform, in placing themselves under heavy liabilities; but if the shareholders wished the committee to take the responsibility, there was not a man of them who would shrink from the task; they were already "in for it," and there was nothing for them but to meet the matter boldly.

Mr. LAMOND then read the committee's report, from which it appeared that the amount subscribed, to pay the creditors the first 10s. in the 1*l.*, was 101,575*l.*, of which sum 30,349*l.* 3s. 11d. had been lodged in the bank in the name of trustees; and it recommended every shareholder, who wished to keep the company and himself out of the *Gazette*, immediately to sign the deeds, and approve of the directors calling a meeting for winding up their affairs.—The CHAIRMAN observed, that it had been stated that some of the creditors wished to be paid in full; but he would say, that there was nothing that the committee would more set their faces against, and for himself he would rather go into the *Gazette* than show any preference. If they were to be pressed for immediate payment, they must be made bankrupts; and if driven to such course, there would be a crash in Glasgow, which would not find a parallel in the memory of the oldest inhabitant.—He then moved the following resolution:—"That, subject to all claims against directors or otherwise, the shareholders approve of the report now read, and of the whole proceedings of their committee; and, with the view of carrying out their arrangement with the creditors, as contained in the minutes of the last general meeting, held on the 22d ult., subject to such modifications as they may be able to obtain, remit to the committee formerly appointed to concur with the directors, and take all necessary steps for that purpose; but in respect of the great difficulty of providing funds, and of the general hardship of the case, the meeting strongly impressed upon the creditors the necessity of making some modifications on the terms proposed."

Mr. J. ORR seconded it, which was carried unanimously; and a vote of thanks to the chairman having been passed, the meeting broke up.

ROYAL CORNWALL POLYTECHNIC SOCIETY.—At the annual general meeting of this society, held at the Polytechnic Hall, Falmouth, the president, Sir C. LEMON, Bart., M P., having taken the chair, the proceedings commenced with the reading of the report of the committee for the past year, from which it appeared that the society had made very satisfactory progress during that period. Upwards of 100*l.* had been awarded in prizes at the late exhibition, the whole of the back debts of the society had been paid off, and most of those which had been incurred during the present year—the balance in the hands of the treasurer being sufficient to meet the few that remained unpaid. The following gentlemen were elected in the places of the retiring vice-presidents:—Right Hon. Lord Wodehouse, F. Rodd, Esq., W. P. Williams, Esq , and J. Batten, Esq. The list of premiums for the coming year was then arranged, and the following addition made by the president:—A premium of 5*l.* for the best statistical account of the effects, vital and economical, of the man engines at Tresavean and United Mines. Charles Fox, Esq., expressed his intention of offering another premium through the society. Votes of thanks having been passed to the ladies and gentlemen who had made donations to the society during the past year, to those who had officiated as judges, and lent specimens of fine art, &c., at the late exhibition, and to the president, for his kind services then and through the year, the meeting separated.

THE COPPER TRADE.

In making up the statistical returns of the quantity of copper ores sold in Cornwall and Swansea, given in our last and present Journals, we have been forcibly impressed with the extreme importance of this branch of national staple produce, and of the extraordinary outlay, and proportionate return, made by the principal smelting houses. In proof of this, we here append the amount of purchases made by each of the eight firms at Swansea, of the Cornish ores sold during the year 1847, and which will be seen amounted to 153,120 tons, producing 873,436*l.* 10s. They were as follows:—

Companies.	Tons.	Amount.
Mines Royal	9,459	£50,666 5 8
English Copper Company	19,980	106,977 16 5
Vivian and Sons	32,701	174,908 18 1
Freeman and Co.	18,006	98,640 3 4
P. Grenfell and Sons	18,512	103,276 19 5
Crown Copper Company	1,185	7,091 10 0
Sims, Willyams, and Co.	19,213	103,485 5 8
Williams, Foster, and Co.	34,064	228,389 11 5
Total	153,120	£873,436 10 0

These results alone must astonish those who may not have noticed, or only casually thought on, the subject; but it has yet to be borne in mind, that, in addition to these quantities, many private transactions take place; and the same firms also purchase at the Swansea ticketings, where all the Welsh, Irish, and foreign ores are disposed of; the total of which, during 1847, was 47,611 tons, producing 641,056*l.* 10s. 6d., and were purchased as follows:—

Companies.	Tons.	Amount.
English Copper Company	5,592	£71,458 18 6
Freeman and Co.	2,607	35,691 16 1
P. Grenfell and Sons	5,432	76,873 14 8
Crown Copper Company	16	80 4 3
Sims, Willyams, and Co.	6,184	97,934 11 6
Vivian and Sons	12,623	147,070 10 6
Williams, Foster, and Co.	13,787	185,168 4 0
Mines Royal	204	2,334 0 0
Schmieder and Co.	1,166	24,444 11 0
Total	47,611	£641,056 10 6

These returns show, that upwards of *one million and a half sterling!* is expended in one year by seven houses (one alone, we perceive, having purchased to the amount of 413,557*l.*), in the purchase of an unmanufactured article, produced from the earth by labour alone, and employing, before it arrives at the smelters to be reduced into metal, many thousands of human beings, who again, from this source, support, in the majority of instances, large families. The above 153,120 tons of ore from Cornwall produced 12,490 tons of fine copper; and, taking the average produce of the Swansea Ticketing Papers at from 20 to 25 per cent., the above 47,611 tons of ore would produce as much more—giving an amount (in round numbers) of 25,000 tons of merchantable copper, distributed throughout the markets of the world by *seven firms*. On taking into consideration the quantity of coals and fluxes required for producing this quantity of metal, the numerous traders deriving support in supplying the necessary materials for raising the ore—such as castings, machinery, tools, tallow, oil, hemp, iron, &c.—the labour employed, and the shipping continally in demand for freightage, the copper trade must be considered one of the most important branches of British industry, and, at least, as holding the rank next to coal and iron.

THE IRON TRADE IN SOUTH STAFFORDSHIRE.

We extract from a second edition of the *Birmingham Advertiser* of yesterday, the following statement, prepared with the greatest accuracy, of the furnaces in and out of blast on the 1st January, inst.; from which (our contemporary adds) it will be seen that, notwithstanding the depression of the trade at the present time, the affairs of the district are in a more encouraging state than in 1843:—

WOLVERHAMPTON DISTRICT.

Name of Work.	*Firm.*	*In Blast.*	*Out.*
Chillington	Chillington Iron Company	3	1
Stowheath	W. and J. S. Sparrow and Co.	0	5
Osier Bed	William Sparrow and Son	2	1
Priestfield	W. Ward	2	1
Parkfield	Parkfield Iron Company	3	1
Wolverhampton	Dixon and Hill	2	1
Millfields	William Riley	2	1
Coseley	George Jones	2	0
Bilston	W. Baldwin and Co.	1	1
Bilston Brook	John Parsons	0	2
Bradley, or Hallfields	B. Gibbons, jun.	1	0
Wednesbury Oak	P. Williams and Sons	3	0
Willingsworth	R. Haines and Sons	1	2
Gold's Green	J. Bagnall and Sons	2	1
Capponfield	Ditto	3	0
Ettingshall	T. Banks and Son	1	1
Horseley	John Hartland	2	0
Coney Green	Lord Ward	1	2
Wednesbury	Lloyds and Co.	1	1
Bentley	Earl of Lichfield	0	4
Tipton	C. Cresswell and Sons	1	1
Union	P. Williams and Co.	2	1
Bilston	Thomas W. Vernon	1	0
Priorsfield	H. B. Whitehouse	2	1
Coseley, or Deepfield	Pemberton and Co.	2	1
Birchills	P. Williams and Co.	1	0
Pelsall	W. F. Fryer	1	1
Dudley Port	Hopkins and Son	1	0
Oldbury	J. Dawes and Son	2	0
Dudley Port	T. Morris	1	0
Waterloo, or Broadwater	Grocutt and Colbourn	1	1
Crookhay	Thos. Davies and Sons	3	0
Bilston	George Jones	2	1
Darlaston	E. Addenbrooke	1	1
Darlaston Green	Bills and Mills	1	0
Moseley Hole	Chillington Company	2	0
New Birchills	George Jones	0	2
		56	35

DUDLEY DISTRICT.

Netherton	M. and W. Grazebrook	1	1
Dudley Wood, Corngreaves, Netherton	British Iron Company	2	6
Windmill End	Sir H. St. Paul	0	2
Withymoor	Barrs and Best	1	1
Parkhead	Evers and Martin	1	1
New Corbyn's Hall	B. Gibbons	3	0
Level (the old)	William Izon	1	1
Brettell Lane	W. and J. Wheeley	1	1
The Lays	W. and J. Firmstone	2	1
Corbyn's Hall	Galvanised Iron Company	2	2
Shutt End	James Foster and Co.	4	0
Oak Farm Works	Oak Farm Iron Company	0	2
Russell's Hall	Blackwell and Co.	3	0
Ketleys	Jones and Oakes	0	3
Buffery	J. Haden	0	1
Woodside	Bramah and Cochrane	1	1
The Level	Lord Ward	1	2
Total in South Staffordshire		79	60

The number of furnaces blown out in Dec., 1847, in consequence of the depressed state of trade, was 38. The number of furnaces in blast in the depressed state of trade in June, 1843, was 72; out of blast, 69.

NATIVE PLATINUM IN NORTH CAROLINA.—In November last, I received m a letter from Hon. T. J. Clingman, of Asheville, N. C., a small reniform grain of native platinum, with the following remark.—"The enclosed metallic grain was given me by a friend, who says it was found among the gold of one of his rockers—it looks like native platinum." Its weight was 2·541 grs. There was no difficulty, by means of its physical and chemical properties, in identifying it with the subsiance above suggested. Its specific gravity = 18. In a subsequent letter, dated Jan. 3 (written before receiving my reply), Mr. C. adds still farther, "Mr. T. T. Erwin, who presented it to me, says that his overseer, in whose veracity he has the fullest confidence, gave it to him with the gold obtained from the rocker, and that he (Mr. Erwin), does not entertain the smallest doubt of its having been found in his mine in the north part of Rutherford Co. Should it prove to be platinum, it is a matter of interest to me, as the first specimen of that mineral found in the United States." Fearing, however, that the grain might have originated in a foreign locality, I addressed particular inquiries to Mr. C. on this head, and received from him the following additional statements,—"The platinum specimen formerly sent you, was taken from the gold rocker by Mr. Lyon, the overseer of Mr. Erwin. Mr. L. is a man of good character, and all persons who know him entertain no doubt whatever of his having obtained the specimen as represented. Mr. L. had no suspicion of its being anything more than silver, which was known to be found with the gold. The place at which he obtained it, was in Rutherford Co., near the line of the new county of McDowell. I would have sent you his certificate, but I had no doubt that other specimens would be found; in fact, almost every miner to whom I described it, said he had seen just such specimens, but they had supposed them to be fragments of steel or iron that had been broken from the edges of the mining tools."—*Silliman's American Journal.*

THE IRON TRADE OF SCOTLAND.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—We transmit you herewith our annual statement of the Scotch pig-iron trade for the past year. The particulars of exports, production, stocks, prices, &c., are given so minutely, as to render few remarks necessary. The deficiency of production, as compared with 1846, when there were apparently fewer furnaces in operation, arises from the stoppage of several of the works for many weeks, on account of a strike of the miners, and also an alteration in the gauge of the mineral lines of railways. These causes have ceased to exist, and the former regularity, in these respects, continues uninterrupted. Since the fall in the market value of pig-iron, several of the least favourably situated furnaces have been put out of blast; and some others, which were in operation on the 31st December, are now also idle. Of the latter, are the whole of those belonging to the unfortunate Ayrshire Iron Company. The stoppage of this concern, is the only one in the trade that has occurred in this district; the proprietary, however, are sufficiently wealthy to meet the liabilities (which are very heavy) in full, and arrangements have been made for this purpose.

There has not been much fluctuation in the price, and speculation in the article has greatly subsided. A good export demand prevails, and is likely to continue, unless checked by unsteady and high prices. Large contracts have already been made for spring shipment. The exports to foreign ports in 1847 exceed those of 1846 by 24,360 tons—while, coastwise, they have decreased 30,846 tons; making a decrease of the total shipments, as compared with 1846, of 6491 tons. The production is also 40,000 tons under that of 1846. The present extent of local consumption, we believe, will barely reach one-third of what it was at same date the previous year; and the small stock now on hand is entirely attributable to the diminished production, already referred to, during the summer, and to the good export demand.

The data from which our statement is compiled we rely upon as being very correct; and every care has been taken to present the details thoroughly accurate.

Towards the close of the present week, the market has become more active than for some time past, and higher prices have been obtained. We quote the closing price for mixed Nos. at 47s. 6d. to 48s. per ton; and No. 1 at 48s. 6d. to 49s., net cash, free on board.—P. & H. FERGUSON & RHIND: *Prince's-square, Glasgow, Jan. 8.*

Pig-Iron Works and Furnaces in Scotland.

Works.	In Blast.	Out of Blast.	Total.
Gartsherrie	16	0	16
Dundyvan	8	1	9
Clyde	5	2	7
Govan	4	2	6
Calder	3	5	8
Langloan	6	0	6
Cambroe	3	3	6
Glengarnock	6	1	7
Summerlee	5	1	6
Monkland	9	0	9
Coltness	5	1	6
Omoa	4	0	4
Shotts	3	1	4
Castlehill	3	0	3
Blair	5	0	5
Mairkirk	2	2	4
Garscube	0	2	2
Carron	3	2	5
Devon	2	0	2
Forth	4	1	5
Kinniel	4	0	4
Lugar	0	4	4
Eglinton	0	3	3
Total	100	31	131
Works now erecting and nearly ready—Portland	0	0	2
ditto ditto Lochgelly	0	0	2
Total Furnaces	100	31	135

Shipped Foreign, in 1847.

From Scotland ..... 112,131 tons.
„ Ireland 375
„ England ..... 30,954—143,460 tons.

	Tons		*Tons*		*Tons*
Rouen	9145	Christiana	76	Kertsche	100
Dunkirk	4548	Dramen	62	Egypt	15
Havre	1691	Aalborg	239	Constantinople	516
Calais	483	Odense	110	Quebec and Montreal	5002
St. Valery	1133	Halte	83	St. John's	760
Nantes	3217	Frederickwark	630	Halifax	175
Charente	615	Copenhangen	1664	Picton	50
Bordeaux	715	Frederickshalle	70	St. Andrew's	40
Cette	150	Flensburg	200	Miramichi	80
Boulogne	110	Randers	50	Newfoundland	30
Marseilles	2685	Horsens	132	P. E. Island	20
Marans	140	Rudekjobing	20	Yarmouth	170
Caen	78	Antwerp	10	Boston	14195
Gijon	120	Bruges	80	New York	28005
Amsterdam	1000	Brussels	146	Baltimore	660
Scheidam	746	Ostend	140	New Orleans	752
Rotterdam	13288	Jersey	95	Mobile	25
Dordt	6908	Cronstadt	800	Philadelphia	1321
Memel	60	Oporto	112	Charleston	35
Rostock	170	Lisbon	171	Havanna	145
Pillau	605	St. Sebastian	65	Jamaica	70
Swinemunde	375	Bilboa	655	Bahia	15
Danzic	555	Barcelona	686	Pernambuco	80
Grieswalde	50	Seville	75	Rio de Janeiro	1100
Stettin	12067	Maluga	40	Valparaiso	148
Aarhus	87	Valencia	20	Sydney, N. S. W.	891
Lubec	70	Alicante	112	Singapore & Batavia	301
Newstadt	40	Cadiz	50	Calcutta	131
Leer	354	Genoa	2717	Bombay	135
Kiel	220	Leghorn	989	Shanghae	175
Haderaleben	120	Naples	1225		143,460
Rendsburgh	1439	Cevita Vecchia	112	Constwise	227,005
Hamburgh & Altona	10265	Palermo	65		
Bremen	1466	Trieste	594	Total	370,465
Varel	496	Venice	564		
Ebling	100	Odessa	50		
Drontheim	80	Galatz	12		

Comparative View of Exports, Stocks, Production, and Prices—1845-6-7.

EXPORTS.

	1847.	1846.	1845.
France *Tons*	24836	35567	10674
Jersey	95	268	130
Holland	21942	30094	4068
Belgium	376	505	—
Germany	28539	18167	3743
Denmark and Sweden	3416	2480	624
Russia	962	—	20
Austria	1158	386	182
Turkey and Egypt	531	260	565
Italy	5108	5695	1795
Spain	1703	2703	212
Portugal	283	435	198
South America	1343	538	250
West Indies	215	170	160
New South Wales and India	1458	607	734
British America	6327	7307	5391
United States	44993	13918	25915
China	175	—	—
Africa	—	—	70
Total Tons	143460	119100	50671

STOCKS AND PRODUCTION.

	Stock.	Production.
31st December, 1845 *Tons*	230,000	400,000
„ 1846	145,000	580,000
Decrease in 1846	85,000	
Increase in 1846		180,000
31st December, 1846	145,000	580,000
„ 1847	90,000	540,000
Decrease in 1847	55,000	
Decrease in 1847		40,000

PRICE.

	1845.	1846.	1847.
January	£3 0 0	£4 0 0	£3 13 4
February	3 10 6	3 17 6	3 13 4
March	5 0 0	3 10 0	3 11 1
April	5 0 0	3 6 0	3 10 8
May	4 5 0	3 10 0	3 5 3
June	3 3 0	3 8 0	3 5 0
July	3 5 0	3 10 0	3 8 1
August	3 2 6	3 15 0	3 7 9
September	3 15 0	3 13 6	3 6 6
October	4 0 8	3 9 0	2 19 10
November	3 15 0	3 9 0	2 11 0
December	3 15 0	3 12 6	2 7 6
Averages	£3 16 0	£3 11 8	£3 5 0

Stock.

Stock on hand 31st December, 1846 *Tons*	145,000
Stock this date, in stores and makers' hands	90,000
Decrease	55,000
Furnaces in blast, 31st December, 1847	100.
Computed make in 1847 *Tons*	540,000
Add stock 31st December, 1846	145,000—685,000
Exports as above	370,465
Stock this date	90,000
Leaving for malleable iron and foundry consumption, &c., in 1847	224,535—685,000

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY.....Provident Clerks' Life Association—London Tavern, at Six P.M.
TUESDAY.....St. Katharine Dock Company—offices, at Twelve.
Calcutta and Diamond Harbour Dock and Railway Company—offices, at Twelve for One.
WEDNESDAY...Copper Miners' Company—Guildhall Coffee-house.
SATURDAY....Sambre and Meuse Railway—London Tavern, at One.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

THE LONDON JOINT-STOCK BANK.

The half-yearly meeting of this bank was held at the establishment in Princes-street, on Thursday last.—G. H. FORSTER, Esq., in the chair.

Mr. HEWETT, the secretary, read the report (for which see our advertising columns), and following statement of accounts:—

LIABILITIES AND ASSETS—FRIDAY, DEC. 31, 1847.

Dr. *THE LONDON JOINT-STOCK BANK.*

To capital paid-up—viz., 60,000 shares, at £10 each		£600,000	0 0
Amount due by the bank		1,971,912	8 1
Amount of the "guarantee fund," 30th June, 1847	£121,919 9 6		
Six months' interest on ditto, at £3 per cent. per annum	1,818 15 10	123,748	5 4
Undivided profit for the last half-year		16,663	1 6
Balance carried to profit and loss account		73,272	14 6
Total		£2,785,596	9 5
Cr.			
By Exchequer Bills, India Bonds, &c.		£382,760	15 2
Bills discounted, loans, and cash		2,373,210	14 3
Building, furniture, &c., in Princes-street	£19,250 0 0		
Ditto ditto in Pall-Mall	10,375 0 0	29,625	0 0
Total		£2,785,596	9 5

PROFIT AND LOSS ACCOUNT

Dr. *Of the London Joint-Stock Bank, for the half-year ending Dec. 31, 1847.*

To current expenses, proportion of building expenses, directors' remuneration, bad debts, income tax, &c.	£39,106	6 1
Amount carried to profit and loss, new account, being rebate of interest on bills discounted, not yet due	10,318	13 8
Amount transferred to the credit of the "guarantee fund," in addition to the above amount of £123,748 5s. 4d.	10	16 3
Dividend account for the payment of half-a-year's dividend, at the rate of £6 per centum per annum, upon £600,000, amount of paid-up capital upon 60,000 shares	18,000	0 0
Ditto for payment of a bonus of 7s. 6d. per share	22,500	0 0
Total	£89,935	16 0
Cr.		
By balance brought down	£73,272	14 6
Undivided profit, brought forward from the last half-year	16,663	1 6
Total	£89,935	16 0

The CHAIRMAN signified, that the directors had written off everything they were aware of as bad or doubtful, before they declared the amount available for a dividend; indeed, they had rather exceeded than diminished the losses, in making their estimate, so that the proprietors might not remain under any false impressions.

A PROPRIETOR asked, what was the amount of defalcation?

The CHAIRMAN said, the whole defalcation amounted to about 8000*l.*; but they had securities for 2000*l.*, which reduced it to about 6000*l.* He regretted that the defaulter, a man the directors had so much confidence in, could have so blighted his future prospects. He assured the meeting that there had been no laxity on the part of the directors to give rise to this misfortune; and that every circumstance connected with it would be traced out by the directors, if possible.

Mr. HODGKINSON asked, if the west end branch had ever paid?—and, if not, whether it might not be abandoned?

The CHAIRMAN said, it had paid it expenses, and left a handsome profit to the establishment.

The report was adopted, and the retiring directors were re-elected, when Mr. JOSIAH WILSON moved a vote of thanks to the directors.—Mr. BORRADAILE seconded the motion; which was carried unanimously.

A vote of thanks having been passed to Mr. POLLARD, the manager, that gentleman said, that he had 37 years' experience of banking; and he had no hesitation in saying, that this bank had every appearance of becoming the first of the kind in the metropolis.—The meeting then adjourned.

COLONIAL BANK.

The usual half-yearly meeting of the proprietors was held at the Bank, in Bishopsgate-street, on Thursday, the 11th inst.

A. COLVILLE, Esq., in the chair.

Mr. CALVERT (the secretary) read the report, from which it appeared that the profit for the half-year was 22,236*l.* 2s. 10d. The directors alluded with pain to the sad effects of the late panic on the West India interests, combined with the depreciation in the price of sugar, which had led, as might be expected, to a considerable amount of returned bills. This circumstance induced the directors to recommend the proprietors to forego the expected dividend on this occasion, and to allow the amount to go towards the diminution of the bad and doubtful debts. As the interest of this bank, and that of the colonists, was identical, the directors urged the proprietors to exert themselves individually and collectively, for the purpose of aiding the endeavour to induce the Ministry to alter or repeal the law admitting *slave-grown* sugar to the prejudice of that of our West India colonies, which was produced by free labourers. The balance-sheet showed the total of assets and liabilities to be 1,429,582*l.*

Mr. PELLS asked, what was the extent of the ascertained bad debts?—The CHAIRMAN answered, that when this amount of 22,236*l.* was appropriated, the balance would be reduced to about 7000*l.* As to the bills now in abeyance, nothing certain could be said at present, as many might be paid in full, and others in the course of a limited time.

THOMSON HANKEY, Esq., wished to know whether there was any fear of another call, so as to carry on the operations of the bank, and how far the capital might be considered intact?—The CHAIRMAN answered, that the whole capital of 500,000*l.* might be considered intact, with the exception of the 7000*l.* balance of bad and doubtful debts. (Hear, hear.) As to making another call, no such intention existed, neither was it necessary for carrying on the operations of the bank. A resolution was then passed, for adopting the report, and for appropriating the balance of profit in the way recommended.

The CHAIRMAN stated, that the condition of the West India islands was lamentable. The suspension of the West India Bank had caused a complete panic in Barbadoes and Trinidad. The main cause, however, was the Government placing the *slave-grown sugar* of other countries on a level with that of our own colonies, which was produced at a greater cost from the employment of *free* labourers. Unless this measure were repealed, he considered it impossible for the cultivation of the colonies to go on much longer; and, as to banking operations, they must eventually cease altogether. (Hear, hear.)

The retiring directors were then re-elected; when THOMSON HANKEY, Esq., moved, and Sir GEORGE CARROLL seconded, a vote of thanks to the directors, which was passed, and the meeting adjourned.

CUNNINGHAM AND CARTER'S PNEUMATIC RAILWAY.

We understand that, in addition to the working model already exhibiting at Sydenham, the patentees are constructing another, in the grounds behind the house, of 150 ft. in length, with a gradient of 1 in 12. There will be a double line of railway; and this expense is being incurred, to show the power of their system in ascending inclines, and in the command held over the trains in descending. We believe it will be in readiness in about a fortnight, when we shall give a full account of the experiments made. The following favourable notice appears in the *Eureka*, a scientific periodical, published at New York:—"A patent has been taken out in England, by Messrs. Cunningham and Carter, for improvements in railway transit, which is certainly novel, and presents claims of decided merit. One thing appears to us certain, that, had this invention come in with the first attempts at railroad travelling, nothing of the present system would ever have existed. Or, had a tithe of the expense which has been foolishly wasted on the atmospheric system been laid out on this invention, it would now, we think, be considered the mode. But it is not too late, and will work its way into a practical test yet. The rails are laid as usual, except that they are not required to be nearly as heavy as at present, as by this improvement the locomotive is dispensed with. The power used is that of atmospheric air, made to operate the pistons of a great number of small engines, which are placed along the line of rails, and connected to a pipe under ground, from which the air is continually exhausted by steam-engines. These small air-engines give rotary motion to a number of wheels placed *horizontally*, in sets of three each, at a distance of about 300 feet apart, along the rail. The passenger or freight cars next have a rail extending along their sides, from end to end, which is regulated so as to come in contact with the peripheries of the aforementioned wheels. The small air-engines are set in motion whenever a car comes in contact with the horizontal wheels—a valve being opened by the car as it approaches—and the engines operate only long enough to pass the length of the train. The idea is for these wheels to give sufficient momentum to the car to send it along to the next set of driving wheels, and so on throughout the whole line. This constitutes the base of the invention; besides this, there are arrangements for stopping and starting, and for the prevention and cure of accidents, &c.—all of which are admirable, and show that the patentees have gone thoroughly into the subject, and, we think, are prepared to meet every objection."

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

"If the revenue can afford it, we shall be happy to see a reduction of the duty on salt." Such is the substance of the view taken by the Committees of the Chamber of Peers and the Chamber of Deputies, appointed to draw up the addresses in answer to the King's speech, on the announcement of the Government of its intention to effect a reduction of the salt duty. Now, as these committees speak the sentiments of the majority of the two branches of the Legislature, we may suppose that the projected "reform," as it is called, stands a very poor chance indeed of being adopted; and, perhaps, it would not be uncharitable to assume, that the Government itself will be by no means annoyed thereat.

As I said in my last, the measure relative to salt is a very objectionable one. The persons interested in the different salt-works have risen as one man against it, and even those who sell salt by retail are opposed to it. Government monopolies are always objectionable, and it is especially objectionable to see one of the most necessary articles of human consumption exclusively in its hands; yet it is coolly proposed to give it a monopoly of the sale of salt. Besides this, there is really no satisfactory reason for depriving the present owners of salt-works of their establishments—for virtual deprivation it would be, to compel them, as the bill proposes, to sell their salt at the price the Government may think it necessary to fix. It is true, that they are "protected" against foreign salt, but their protection goes no great way in making salt so excessively dear; and even supposing that it were as monstrously excessive as the iron duties, would that be a reason for compelling them to sell their produce at the price the purchaser may choose to name? Clearly not. Why, then, should they be made to suffer, because people clamour for cheap salt? It is not they who have placed the duty on salt, which is the principal thing in making the article so dear.

With all their anxiety for cheap salt, I do not think the French will be willing to accept it at the price of the ruin of a deserving class of the community, who have invested large capital in their undertakings, and ruin would certainly fall on them from the adoption of the measure. By making this deadly war on the poor salt people, the Government may try to turn attention from the infamous monopoly on iron; but albeit the French are a very credulous, and, in such matters, very stupid, people, it is hard to believe that they can be so egregiously duped—that they can consent to accept the sacrifice of a lamb, and continue to allow themselves to be preyed on by the wolf.

With reference to what has been said in the *Mining Journal*, on the possibility of bringing English coal to Paris, it may be mentioned, that some dealers are now advertising in the newspapers, that they have English coal to sell. One large establishment has sent out circulars announcing a similar fact; and I have observed, as no insignificant "sign of the times," that several of the small dealers have had bran new sign-boards just stuck up over their shops and yards, with the inscription "Charbons Anglais et Belges," in gigantic letters.

I am sorry to have again to notice the everlasting question of the Coal Company of the Loire, but as you expect to be kept acquainted with all that is passing, there is no alternative. The St. Etienne newspapers of Sunday last, which have reached Paris this morning, publish a note in the name of the two deputies of the town, in which it is stated that they (the said deputies) consider all that has been said about the company being about to be constituted into a *société anonyme*, as unfounded. They state further, that they have presented a protest to the Government against any such concession being made to the company; and they add, that the Government is not disposed to comply with the company's wishes.

No doubt every respect is due to any assertion of the deputies of St. Etienne, even although one of them be that unhappy M. Lanyer, who goes into fits at the sight of a piece of English coal or iron; but, nevertheless, I think their present declaration must not be received too strictly to the letter. I *know*, on the best authority, that, about three weeks or a month ago, as I told you at the time, the Ministers of the Crown, assembled in Cabinet Council, formally decided that the guarantees which the company offered to the town of St. Etienne against the price of coal being unduly raised, *were sufficient*; and that its bye-laws should be referred to the Council of State to be examined, previous to the constitution in *société anonyme*. This was, to all intents and purposes, a formal approbation and sanction of the demand of the company. The reference to the Council of State was little more than a mere matter of form—for it was not likely that the council would have anything to say against the bye-laws of the company of sufficient importance to prevent the signing of the Royal ordinance of constitution in *société anonyme*; and even supposing it had, the Government was not necessarily bound by its decision. In this position, I understand the case now is—the Council of State is engaged in examining the bye-laws; and, when it shall have given its decision, there is every probability that the ordinance will be signed at once. I say, every probability; for it is impossible to suppose that the Government can allow itself to be influenced by the noisy opposition of a portion of the population of St. Etienne, even although it be headed by the two members and the mayor. The latter worthy has not only sent a new protest against the company to the Government, but has forwarded a petition against it direct to the King, as if the King would occupy himself personally with any such matter. Certain members of the Municipal Council go even farther than he does—for, in their last sitting, they flatly refused to meddle with any other business, until the "great coal question" (as they call it) shall be set at rest. As to the St. Etienne newspapers, they literally contain scarcely anything else than what concerns the same matter; and the journals, for miles around, pay great attention to it. But notwithstanding the members, the mayor, great part of the Municipal Council, and the newspapers of St. Etienne, are as strongly opposed to the company as ever, it must not be supposed that the opposition is universal, even in that strong hold of the company's enemies. Far from it; the fact is, that the chiefs of many of the principal metallurgic establishments, ribbon manufacturers, and glass works of the town and district, which consume nearly all the coal that is consumed in the department of the Loire, have *declared themselves in favour of the company*. The acting partners of the great establishments of Hurter and Co., and Jackson Brothers, have written to the local newspapers to state that they see no objection whatever to the company being constituted into a *société anonyme*, now that it has offered to give security that the coal sold to St. Etienne shall never exceed a fair price. The testimony of these gentlemen is peculiarly valuable—for not only were they at one time the leaders of the opposition to the company, but they both use immense quantities of coal—one of them as much as 100 tons *a day*. A shareholder in the company has written to me from London, to ask, whether it would not be advisable to sell out at present, so as not to incur the risk of the Government refusing, after all, to grant the ordinance of *société anonyme?* I most unhesitatingly answer in the negative. There is no valid reason for refusing to accord such an ordinance to the company. The right to it is clear. The company may be, as is said, a monopoly; but as it is a monopoly, which preserves a great coal basin from destruction, what objection can there be to it, provided it accepts an undertaking which shall prevent it from making coal unreasonably dear? Besides, even if the constitution into a *société anonyme* be refused, the company will be in no worse position than it is now. The value of that constitution is this—it limits the liability of the shareholders, gives the Government some control over the company, and, therefore, increases the confidence of the public; that is all. That "all," it is true, is not be despised, though, you will perceive, that its being withheld is not a sufficient reason to create serious alarm among the shareholders.

In connection with this question of selling out, I may mention, that at Lyons, where a great number of shares are placed, the principal holders confidently calculate, that before many months shall have passed, each share will be at 120*l.*, and for that reason they refuse to sell. Perhaps there is great exaggeration in that calculation, seeing that the last price at which the shares were done at the Paris Bourse was only 26*l.*; but that an extraordinary advance would take place on the constitution of the company in *société anonyme* cannot be doubted.

The following singular paragraph is extracted from one of the market reports of Paris:—"Our place is in an embarrassed position, in consequence of what is passing relative to the *fers laminés* of Bourgogne and the Nord, which have just declared open war on each other. The Chatillonnais has established depôts among the principal dealers in iron of Paris. Maison-Neuve has just made a choice of a vast depôt for itself. Although Chatillon maintains its price at 360 fr., offers are made at the same price, owing to the great dread which is entertained of a decline—thus Paris will have the following depôts: Chatillon, Maison-Neuve, Montataire, Fourchambault, l'Eminence, Ancy le Franc, l'Aveyron, Hayange, &c. In addition to its principal depôt at Paris, Chatillon deposits 10,000 tons with two dealers. On account of this great number of depôts, the ironmasters of the Nord have endeavoured to force the dealers at Paris to take a certain quantity of iron every month, but the dealers have refused—in consequence, circulars are to be addressed to the consumers, making offers at 32 fr. the 100 kilogrammes, instead of 34 fr., the price at which that district sold. On the whole, there are no quotations, and if the ironmasters do not see to it, the approaching season promises to be a bad one."

The Grande Montagne (Zinc) Company calls for the payment of the last instalment of 10*l.* per share before the 1st February next. Hitherto, the stake of English shareholders in this company has been but small; but I am given to understand that several capitalists on your side of the Channel have expressed a desire to invest in it, from a conviction that it is destined to rival its great predecessors—the Vieille and the Nouvelle Montagne. Considering the extraordinary, and, in fact, astonishing success, which has attended those companies, it is not remarkable that warm desires should be manifested to embark in well-ordered zinc speculations in Belgium. Now, I think, from all I have heard, that the Grande Montagne is one of these. I say this without any intention of doing what is called "puff" it; but from a conscientious belief that it fully merits it.

The *Journal des Chemins de Fer et des Mines* contains the following paragraph respecting the Vieille Montagne:—"From information obtained from a good source, it appears that the production of zinc by this company, in 1849, will reach 18,000 tons. For 1848 the estimate is 12,000 tons. The company has just devoted 24,000*l.* to the reparation and increase of its furnaces, which enables it to enter on a new era of its existence. It can calculate, we are assured, on a profit of 350 fr. per ton, for 1848. Independently of the produce of calamine, which it may sell, and of the profits which it will realise on the zinc of Silesia, which it purchases, a very high dividend will be obtained, which will be paid in the month of April, 1849. The cost of manufacture diminishes as the production increases. It may, indeed, be anticipated that with 1800 tons of production in 1849, the Vieille Montagne will give during that year 50 per cent. more than in 1848. That is a brilliant result founded on figures, the correctness of which has been established by experience."

A meeting of the shareholders of the coal-pits of Blanzy is called for the 22d February, to deliberate on the propriety of increasing the capital, to enable the company to extend its operations.

The weekly letter from St. Dizier gives prices as 340 fr. for *fers battus* for Paris—350 fr. ditto for the province; 340 fr. *fers laminés*; 345 fr. to 350 fr. *fontes blanches*.

Great dulness continues to prevail in all commercial undertakings—Paris, in fact, still suffers from a prolonged "crisis"—not a terrible tempest like that which lately wrecked so many houses at London, but a crisis dark, threatening, and lowering. There is no present appearance of better times coming, and, consequently, it is impossible to fix a period when mining enterprise will take that spring which it was so confidently predicted it would take. It is deeply to be lamented that the crisis should have come just at the very moment at which public attention was beginning to be turned to mining undertakings, and at which a real desire to embark in them, on an extensive scale, was manifested.

The Vieille Montagne Company advertises that it is ready to pay 40 fr. per share, as the interest of 1847. The dividend arising from the profit realised, will be paid at a subsequent period.

Some machinery on an extensive scale is being constructed at Nantes, for the iron-works of Aubin.

M. Marie, formerly of the iron-works of Fourchambault, has formed a little company, with a capital of 60,000 fr., in 60 shares, for what is called —"The plombage antimonial of iron, sheet-iron, and cast-iron."

Very loud complaints are made of the new Post-office arrangements. The French Post-office manages matters so badly, that we actually receive letters and journals from London *later* than under the old system. Last Wednesday, it is said that upwards of 10,000 letters were not sent off, and on Thursday 2000 shared the same fate! This is really scandalous.

Paris, Wednesday.

BELGIUM.—I have to inform you, that it has been ascertained on good authority, that the reports of negociations being on foot between the English and Belgian Government, for reductions of the duties on English coal and cast-iron imported into Belgium, is unfounded. It is not known how the report originated, but it was supported on authority which secured it general credit. Until its falsity was perfectly ascertained, the Belgian coal and iron people were in state of great alarm, though really there is not the slightest reason on earth why they should continue to enjoy "protection" against English products. They are now quite strong enough to be able to do without leading strings.

The Prussian Government has restored the duty of 15 *pfenning* per quintal on Belgian coal, imported into the Rhenish provinces. At this the Belgian coalowners rave furiously; but what right have they to complain when, with one of the richest coal-fields in Europe, they tax the importation of British coal?

The Company of the Coal Pits and Iron-Works de l'Esperance, at Seraing, announces, that the interests falling due on the 15th January, will be paid, on and after that, at Brussels and Paris.

The great success of the Vieille, Nouvelle, and other zinc companies, has led to several demands for concessions of zinc workings to be addressed to the Government.—*Brussels, Tuesday.*

NEW IRON AND ZINC WORKS IN PRUSSIA.

A new mining and smelting company has just been formed under the name of the "WITTEN ZINC AND IRON COMPANY," for the purpose of supplying the various markets of Prussia, and the neighbouring states of the Zollverein, with iron; and France, England, and the East Indies, with spelter, either in cake or sheets. The statistical and commercial data upon which the new company has based its calculations and estimates, are, unquestionably, of a most encouraging nature. The main object in view appears to be the establishment of smelting furnaces in Westphalia, constructed on the most approved English principles, for the reduction of the iron and zinc ores contained in rich and most valuable mineral properties, extending over nearly 15,000 acres, and situated within a mean distance of 10 miles by railway of the town of Witten. These mines, which have been surveyed by an English mining engineer of considerable experience, whose report is before us, are said to be full of the most precious kinds of hæmatites, containing an unusually high per centage of metal, and attended with extraordinary facility in smelting. Other sorts—such as the steel ore, the hæmatitic yellow, red and brown ochres, and an inexhaustible quantity of the highland hæmatitic ores, and also of the description named by the French, *Mine de fer limoneuse*—are found in large lodes, or strata, throughout the property; and the latter mine is so easily won as to require hardly any but common earth digging up. The whole forms a source of riches which it is almost surprising to find untouched in our times; but the political and monetary circumstances which have been peculiar to that part of Germany for these 30 years, have not allowed, as in this country, a simultaneous development of all the national resources. Although progressing at giant's pace in several branches—such as the silk and shawl trades at Cregeld and Elberfeld—industry not being supported in that part of the Prussian dominions with sufficient capital, could not be extended to the creation of blast-furnaces on a large scale, to smelt, with the agency of coke, the ores so plentifully found in the bowels of the earth.

The local ironmasters contented themselves with reducing these minerals with charcoal, the produce of their own forests, and when the various governments of the Zollverein determined upon the establishment of railways, the disposable capital of the German speculators was at once directed to that mode of patriotic investment; and the proprietors of iron-works, in order to meet the demands, considered it more expedient to import pig-iron, and simply to increase the number of their puddling-furnaces, rather than to erect blast-furnaces, and they have thereby realised such profits as could not be anticipated at first. The quantity of pig-iron imported from Belgium and Scotland has, consequently, been every year on the increase, and exceeds now 100,000 tons.

The new company proposes to fill up that vacancy in the industry of Westphalia, and calls upon the public to support the undertaking, and to participate in the advantages to be derived therefrom. The works are to be established at Witten—a most favourable spot—that town being situate in the middle of the rich collieries of the Ruhr (a coal basin as large as that of Durham), where a network of railways, either complete or in active course of completion, will afford cheap and rapid means of communication with all parts of Germany, the Rhine, the Netherlands, &c., and give considerable facilities for shipping the produce of the works should it ultimately be desirable to do so.

IMPROVEMENTS IN LIGHTING.

[Specification of patent, dated 3d July, 1847, granted to William Edwards Staite, of Lombard-street, gentleman, for certain improvements in lighting, and in the apparatus, or apparatuses, connected therewith.]

This invention consists, *firstly*, in the apparatus, or apparatuses, used for lighting by electricity, being improvements upon a part, or parts, of an invention, for which the patentee obtained former letters patent for England and the colonies, on the 12th day of November, 1846; and he declares that the object of this branch of his invention is to impart more surely such motions to one of the electrodes of the apparatus, that the light may be preserved from going out, be kept more uniform, and be renewed by the action of the apparatus itself whenever it has been put out, provided always the electric current is maintained. An apparatus, embodying such improvements, is represented by several sheets of drawings, annexed to the specification; but as their peculiar character and complexity shut them out from adoption as illustrations in this Journal, we cannot pretend to do more than afford a general outline of this part, referring those readers, who feel specially interested in the invention, to the document, as enrolled at the Rolls' Chapel Office.

The patentee, after describing such apparatus, proceeds to state that the invention comprised in such letters patent, firstly, hereinbefore mentioned and recited, consists, nextly, of a mode, or modes, of manufacturing carbonaceous compounds, of which electrodes are intended to be made, such mode, or modes, being an improvement, or improvements, upon a part, or parts, of the said invention, contained in his former patent. The mode, or modes, in which he carries this part of his invention into effect, is, or are, as follows:—About equal quantities are taken of coal, of medium quality, and of the prepared coke, known as "*Church's*" patent coke, and both reduced to a state of fine powder, and intimately mixed together. The mixture is then placed in close wrought-iron moulds, which may be made either to give the mixture the form of a block, to be afterwards cut into pieces of the required shape, or to give at once to the mixture the form of the intended electrode. In all cases, the patentee prefers making the moulded mass of not more than 3 or 4 inches in its least diameter; for, when much larger, it is liable to have fissures, and not to be of uniform density. The mixture, being placed in these moulds, is subjected to heat and heavy pressure, until it becomes consolidated into a very dense and firm mass, and when the mass is in a heated state, it is plunged into sugar melted by heat (without the aid of any liquid) and kept therein for a short period. It is then taken out, and allowed to become cold, when it is placed amongst pieces of charcoal in a close vessel, which is gradually heated until it attains a full red heat; after which, the temperature is increased to an intense white heat, at which it should be kept for many hours, or even two or three days, according to the hardness and compactness desired; or the mass may be a second time immersed in the melted sugar while hot, and the remainder of the process be again repeated as before.

By coating the mass in this way with melted sugar, any pores that there may be in it (on its external surface at least) are filled up with carbonaceous matter. The carbon, which is found as a hard and solid concrete in old gas retorts, makes very good electrodes, as is well known; but it frequently contains iron, and other impurities, which causes electrodes made from it to split and break, when they become heated in producing the electric light—besides, the quantity of light, when such electrodes are used, is small, compared with that obtained from carbon of the improved description aforesaid. Electrodes, made of gas retort carbon, may, however, be much improved by being gradually exposed to the strongest white heat of a furnace for some days in close vessels with charcoal. The best dimension to be given to such electrodes, as before described, he has found to be follows:—The lower electrode should be as long as can be conveniently manufactured (8 in. for instance) when used for ordinary purposes, and it should be of a cylindrical form—the smaller the diameter, the better is the light; but the larger the electrode is in cross section, the longer it will last with a given current of electricity. The upper electrode need not be of any great length; it is well, however, to have it about one-third as long as the lower one, and of half the diameter.

The patentee states, in continuation, that his invention comprised in the said letters patent, firstly, hereinbefore mentioned, and recited nextly, consists of a mode, or modes, of applying, or employing, currents of electricity, to actuate apparatus for effecting the speedy lighting up and extinction, or obscuration, of signal lamps, in which oil, camphine, or other like inflammable fluid, is the illuminating substance employed. Suppose, for example, there are three such lamps with different coloured glasses—say white, green, and red—which are required to be sometimes lighted, and at other times extinguished, or obscured, as is usual on railways, and not all at once, but in a particular order of sequence, or each under particular circumstances only: he effects this in the manner represented by the drawings annexed to the specification, which exhibit three coloured signal lamps, placed side by side, or they may be placed one above the other. A sectional elevation of one of these lamps is given separately, where there is exhibited a horizontal bar of metal, having a drop bar attached to it, such bar being for the purpose of working three extinguishers—one to each lamp—one of such lamps being shown in vertical section with one of the said extinguishers applied thereto; the said drop bar is attached to a clock-work escapement, the detent of which is alternately retained and liberated by the passage of an electric current; and, by its mechanical force, raises up the drop bar, and causes the light, in whichever lamp it may be, to be put out. The three extinguishers are made to move together, to save the necessity of each being provided with a separate extinguishing mechanism. In the centre of the burner of each lamp there is a small ring of fine platinum wire, which is so contrived, as to touch the wick of the lamp; and the current of electricity being made to pass through this platinum ring, it becomes intensely heated, and thereby ignites the wick of the lamp.

The patentee does not restrict himself, however, to the employment of platinum wire, as carbon for this purpose may be used, or any other difficultly-fusible material; neither does he limit himself to the employment of a ring of any particular form. The wick may, for instance, be a flat wick, and, in that case, a straight piece of wire would be suitable for the arrangement. How the wires from the battery are connected with the lamps it is unnecessary to describe, as the mode of doing so must be obvious to all who are familiar with the subject of electricity. It may be sufficient to state, that one wire for the return current will be sufficient for the whole series of lamps, and the mechanism connected therewith. Having thus described the nature of the several parts of his invention, and in what manner the same respectively are to be performed, the patentee declares, that he claims as of his invention:—Firstly, the mode, or modes, of constructing apparatus for lighting by electricity, so as to produce a combination of rotary motion with vertical motion, in the manner described in the specification, with reference to the mechanism employed for actuating the moveable electrode. Secondly, the mode, or modes, of constructing such apparatuses as aforesaid, with mechanism, for the purpose of regulating the vertical and rotary motion, aforesaid, with reference to the first claim. Thirdly, the use, or application, of melted sugar, as hereinbefore described in the manufacturing of carbonaceous compounds intended to be used in making such electrodes as aforesaid. Fourthly, [illegible] modes, of applying, or employing, currents of electricity, to actuate apparatuses for effecting the speedy lighting up, or extinction, or obscuration, of signal lamps, as hereinbefore described.

Patent-office and Designs Registry, 210, Strand, Jan. 11.

IMPROVEMENT IN SPRINGS.—A patent has been taken out by Mr. J. Woods, of Bucklersbury, for springs for supporting heavy bodies, and resisting sudden and continuous pressure; they are formed of flat plates of steel of equal thickness and breadth throughout, except at the two ends, in such manner that the weight shall tend to deflect the plate in its breadth, instead of its thickness, as has been usual. A plate of steel is wound round a cylindrical or square bar, in a spiral or volute form, hardened and tempered. To form the spiral springs a cast-iron mandril of the proper form is employed, furnished with a wrought-iron stem, collar, and cotter, and the plate of steel is hammered or rolled round it while hot, and then tempered. To obtain springs of different strengths, the breadth and thickness of the steel is varied, as also the pitch of the curve, by which means a higher or lower spiral is formed from the same plate.

A GENTLEMAN, SIXTY YEARS OF AGE, CURED OF A DREADFUL BAD LEG BY HOLLOWAY'S OINTMENT AND PILLS.—Mr. Nicholas Page, residing at Newsham, had been suffering for three years with wounds in his leg of a most awful nature, to cure which he tried a great variety of specifics, and consulted nearly every surgeon within 20 miles of his house, yet all failed to give relief; as a last resource he used Holloway's famous ointment and pills, which healed his leg in a few weeks. In gratitude for the wonderful cure effected at his advanced age, he thus gives every publicity to the circumstance, that others may derive similar benefit. Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

Original Correspondence.

SOUTH STAFFORDSHIRE THICK-COAL WORKING.

SIR,—I happened to get a sight of your paper of the 1st, and could not help being pleased to read what Professor Ansted said in his lecture about the South Staffordshire collieries; yet Mr. Deakin, of Wales, seems to think the contrary. As a collier, born and bred in the district, I can speak to the manner we get the coal, and mean to tell Mr. Deakin, that a great deal of what the professor said is true. The getting of the coal here is let by the masters to whom we call *butties*, at so much a ton, and they are paid extra for all gate-roading and air-heading, the price of which is settled by the ground bailiff and the butty; and, as Mr. Deakin may guess, settled very comfortably too sometimes, and all us poor men are bamboozled about and treated more like cattle than Christians under the butty system, and must spend greater part of our little earnings at the butty's beer-shop, or else have little or nothing to do in his pit. The butty in most collieries cuts the work out how he pleases; and, if he finds a hard bit, he will get by it somehow, or begin to hole about a third up the coal, and so leave it under his feet, and make it all right against the ground bailiff comes down. I must also say, that the practice of boating the coals from the pits, and not weighing them over a machine, is bad, as the masters often get 28 or 30 tons for 20 tons, and so cheat the butty and the parties he takes the lease of—consequently the butty gets it out of us poor colliers; and I hope such men as Professor Ansted will be our friend, and try to get the butty system abolished—as if masters would put a thorough practical miner, called a doggy, to carry on the work for him at so much a week, he would get more coal out of the pit at less expense, and we poor men should be done better by and get regular work, and not be enticed away to drink when there is no work at the pit.

There are three or four short-sighted masters in this quarter, who have taken to work their pits on the doggy system lately. A month ago, I was enticed to go to work in a pit that is working on this system, and heartily glad I am that I went; we work from Monday morning till Saturday night, and one of the other men told me he had not played a day for two months, and under the butty system we always play Mondays—a rule throughout the district; and so Mondays are generally drinking days at the butty's beer-shop; and I should think there is hardly a pit in South Staffordshire that works five days a week once in two months, if under the butty system, as they make the men work till 11 and 12 o'clock for a quarter of a day, and till 2 o'clock for half a day, which overtime, out of so many men, makes nearly as good as a whole day to the butty. The pit I now work in, as I before said, is worked by having a good practical working collier to put us all to work, for which he has, I believe, two guineas a week, and we are also well paid, and not humbugged, and pushed into dangerous places with our lives at stake, to save a shilling; but everything goes on comfortably and orderly—no swearing is allowed in the pit, no quarrelling or fighting, no illtreating the poor horses—in short, no disturbance is allowed at all in the pit, and we all join at every meal time underground in offering up our thankfulness to the Almighty for our preservation and protection, which I assure you was the happiest moment I ever experienced when I entered that pit; and the pit I worked in before was all confusion, swearing, quarrelling, beating the poor horses with rakes or pike-heads, and always somebody getting hurt or killed.

If Mr. Deakin, or any other gentleman, want to know how collieries are carried on here, he should buy a book that I borrowed of a gentleman some time ago. I think it was a Government Report* of this district, where the last great strike was; it is the best book I think I ever read; and if I could afford it, I would buy one to-morrow, as everything is overhauled there. The planning of the mines here I think is badly done; for I once was told by the bailiff, that a rib was 50 yards through it, and the head that I drove was only 9 yards through; but such things as these are happening every day, we generally put small heads through the ribs, to see how near we are, independent of the diallings previously done; and the plans I have fetched from the bailiff's house before now have been as black as my trowsers.

I hope you will not divulge my name to any butty that *may* write to you for it (not as I *now* want to ask them for a job), as I think some collier ought to write to you, when such gentlemen as Professor Ansted, of London, has thought proper to try to benefit your humble servant—

Dudley Port, Jan. 10. A SOUTH STAFFORDSHIRE COLLIER.

WEST CORNWALL RAILWAY.

SIR,—Last week the secretary of the West Cornwall Railway issued a notice of a call of 2*l.* per share, and appended some reasons why such call was made at this unseasonable period of monetary distress. It appears from this statement, that Mr. F. Mowatt, the newly-elected member for Falmouth, who had entered into an agreement with the directors, to take off a large number of unappropriated shares, and to pay the amount of 4*l.* per share, then due on them, has not fulfilled that agreement, and that he now seeks to withdraw from his engagement in that respect, although he had lodged security for the stipulated sum. If this be true, I, in common with my brother shareholders, must greatly regret it; but as we are not informed by our worthy secretary *pro tem.* upon what grounds the honourable gentleman seeks to break through his engagements, it would be esteemed a great favour if some of your numerous correspondents would enlighten us on the subject. It is also stated, that a large amount of calls remains unpaid, and that steps are being taken to enforce the payment of them. This certainly is a move in the right direction; for it would be a great hardship for those who are willing to pay to have repeated calls made on them, when large arrears remain due, and the payment of them is unenforced. But how comes it, that our West Cornwall shares are now unsaleable in the market, as my broker has this week informed me, when the capabilities of the line, if properly brought into play, are of such first-rate character, as to promise a 10 per cent. dividend on the requisite capital? (*Vide* the evidence given before the Committee of the House of Commons, for the prospective value of the line.) The answer is obvious—a distrust prevails, that all is not right at head quarters—that "something is rotten in the state of Denmark." Will any one, conversant with the facts of the case, oblige a large section of the shareholders, by candidly and explicitly informing them, through the medium of your excellent paper, where the mischief lies, and of what it consists. Happily, Lord Monteagle has given notice of a bill for the appointment of public auditors. This will do much to restore confidence in railway investments, and will entitle his lordship, if it be passed, to the best thanks of the railway public. I earnestly hope little time will be lost, after it shall have become the law of the land, before the West Cornwall proprietors will seek its application to the accounts of their line; and I shall be glad to co-operate with any respectable parties, in taking the necessary steps for that purpose, and, if needs be, of bringing the state of the line generally under the supervision of the Railway Board. I am rejoiced to see that the Great Western, the Bristol and Exeter, and the South Devon Companies, intend to apply for a bill, authorising them to increase their interest in the Cornwall line; and I hope they will see it to be for their advantage, to include the West Cornwall also, or to take it on lease, as our short line will be, by far, the most paying part of the whole distance from Bristol to Penzance, estimated in sections of [illegible] lengths. If the directors really intend to make the line, let them but [illegible] shareholders *credible evidence* of it, and they will find their calls readily responded to; but if the money called up is to be spent in law-suits, salaries, and no contracts entered into, for the *bonâ fide* formation of the line, *fear is the case*, then they may rest assured few persons will pay [illegible] until compelled to do so by legal process, and the sooner they [illegible] direction, the better the proprietary will be pleased.—AMICUS.

COMMUNICATION [illegible] GUARDS AND DRIVERS OF LOCOMOTIVE ENGINES.

SIR,—Since your insertion [illegible] communication on this subject, it has been hinted to me, that Mr. [illegible]han Hunt's very neat and simple contrivance comprises all that [illegible] necessary to effect the desired object of enabling the passengers in a train to communicate with the guard. But the means of affording instantaneous and certain communication between the guard and driver of a [illegible]e train are of far more essential importance to the safety of the [illegible] and its load; and it is to effect this purpose, therefore, that I have [illegible] attempt to produce a really effective signal. If Mr. Hunt were [illegible]ate the quantity of steam which passes per second through the ordinary steam whistle of a locomotive engine, he would find that one stroke of the piston of his condensing syringe, though pulled by the arm of a strong man, would be as nothing when compared with high pressure steam—consequently, such a whistle, which might have some considerable sound in a room, could only be heard by the guard when the train is in motion, by his sitting close to it; moreover, in actual practice, the handle of the condensing syringe might often have to be pulled by weak and unsteady hands, in which case scarcely any sound at all would be produced. In my invention, on the contrary, I propose to adopt a signal fully equal in power to that fixed on the locomotive boiler; and, though I have shown in the sketches which accompanied my former communication, and of which I wish you could have inserted, only the stopcock and spanner, still I should recommend, in practice, the adoption of a spring piston instead of the stopcock—spring pistons requiring merely the blow of the hand, accompanied with pressure, or not, according as a short or prolonged sound might be required. It is also a form peculiarly adapted for the arrangement of a bell-pull within the carriage, and well suited to the weakest or most unpractised hand, as any kind of pull, steady, jerked, or prolonged, would equally produce a good signal. I have no wish to depreciate Mr. Hunt's truly ingenious contrivance, but I must state, that the signal proposed by me would be found infinitely more effective, and generally useful, than the very simple expedient of a condensing syringe—an instrument exceedingly difficult to keep in order, if not in constant use. The difference between the two plans is simply this, that Mr. Hunt proposes to have a condensing apparatus attached to each whistle, while my proposal is to supply all the whistles with highly condensed air, wholesale as it were, by means of the power of the water station engines.

Sunny Hill, Parkstone, Poole, Dorset, Jan. 8. H. W. REVELEY, C.E.

* The work alluded to by our correspondent is evidently the Midland Mining Commission, South Staffordshire, instituted in 1843, and is well worthy the perusal of those wishing to obtain a knowledge of South Staffordshire mining.

METALLIC PISTONS—GOODFELLOW, MATHER, &c.

SIR,—It is against my inclination to intrude upon your valuable space, but seeing the presumptuous manner in which Mr. Goodfellow advertises his metallic piston in your and other journals, I am resolved to trouble you with a few remark upon the subject. In the first place, I am pleased with the manner in which Messrs. W. and C. Mather look upon his attempts to cram the minds of the public with his statements as to the qualities of his piston, and which are made in such a manner as to reflect little credit upon their author; and the manner in which he selects the meritorious properties of Messrs. Mather's piston, making them the standard of excellence by which he seeks to gain popularity, must, I think, create a feeling of dissatisfaction in the minds of those who feel interested in the matter. Mr. Goodfellow has had, for some time past, an uninterrupted career in this way; and there is no knowing to what point his assurance might ultimately lead him, were it not for a timely hint occasionally thrown out, which I hope will remind him that there are many who differ greatly in opinion with him, and he must endeavour to understand that there are other piston-makers and engineers besides himself. It is well known, that all respectable and spirited engineers, whose inventions have been superseded by others of superior merit, have willingly given way to their influence. Not so, however, Mr. Goodfellow, who obstinately (with positive superiority staring him in the face) clings to his invention as having *perfection* centered in it—consequently, he fancies that all other ideas on this subject are his own, *with trifling variations*. If he was justified in pursuing this course, it would naturally stem the current of improvement.

I might not have troubled you with these remarks had I not noticed, some few weeks since, a letter from Mr. Hunt on this subject, stating a few indisputable facts, in a style of language that no engineer could misunderstand; but this I presume Mr. Goodfellow thinks beneath his notice—for, as yet, I have not seen any reply; though he has continued to parade Messrs. Mather's piston in his advertisement. I do not know Messrs. Mather's opinion respecting this; but, for my own part, I think they ought to feel grateful to Mr. Goodfellow, for the kind manner in which he gives their piston gratuitous publicity.

From the spirit of his advertisement, I should presume that he is in a continual state of alarm, at the liability to which his patent is exposed to infringement, by parties making and vending them, with slight variations. (For Mr. Goodfellow's idea of slight variations, see his own illustrated advertisement.) What similarity there exists between Mr. Goodfellow's main spring and the helix, I cannot conceive, either in principle, action, value, or anything else; this helix (the subject of the slight variation) has been pronounced, by most of the talented engineers of the day, to be one of the most ingenious, novel, and effective cast-iron springs yet invented.

Now, I may be wrong in giving as my opinion of Mr. Goodfellow's main spring, that it is one of the most inflexible and unlikely springs which a mechanic could have pitched upon; and were it not for the ingenious arrangements, saw cuts, &c., mentioned by Mr. Hunt in his letter, and the liberal amount of labour spent on the outer periphery, it would loose all claim to a place in the class of piston springs. It appears that Mr. Goodfellow insists upon continuing his claim to the originality of vertical and lateral pressure, and which he wishes to authenticate by showing how he established his right in the Court of Exchequer in the year 1846. This I distinctly deny; no such opinion being established in the Court—the verdict given was for using three annular springs. The compound pressure which Mr. Goodfellow strives to get credit for is *public property*—several kinds of pistons having been made before the date of his patent.

I also deny that his piston has a tendency to wear cylindrical; and further, that the vertical pressure contained in his piston, begins to diminish from the moment it is put into action, until the lateral pressure is exhausted—thus proving the want of uniformity in the arrangements of the spring—so that I am at a loss to know the particular stage in which Mr. Goodfellow's piston substantiates his statements.—I. M.: *London, Jan 12.*

SOUTER AND HAMMOND'S SEMI-ROTARY STEAM-ENGINE.—Among the numerous inventions and so-called improvements in the steam-engine, which are continually appearing before the public, is the above—a description of which we now give, leaving our mechanical readers to form their own conclusions of its merits. The steam cylinder nearly resembles, in its outer form, two spherical frustrums, united at their narrow ends, and divided internally into two equal parts by a diaphragm, or partition. The piston shaft, which works horizontally, is made in two pieces—the end of one fitting into a socket in the end of the other, so that each can revolve, independent of the other. To each half shaft is attached a piston of such form, that the cylinder is by it divided into four separate compartments, made steam-tight by metallic packings. Beams are securely keyed upon the half piston shafts, and connected to the cranks, which are at right angles, with each other. Steam being admitted in one of the upper, and one of the lower, compartments of the cylinder, presses down one part of the piston, and the opposite upwards—thus giving a semi-revolution. On the instant this has been effected, the slide valves are so regulated, as to admit the steam in the other compartments, leaving the former ones open to the condenser, and thus produce the succeeding half revolution; a similar series of movements continue to take place, and the operation goes on continuously. The patentees state, that, from the equilibriated manner in which the steam is made to act upon the pistons, but little strain is thrown upon the bearings of the shafts, or any other parts of the engine.

IMPROVEMENTS IN RAILWAY CARRIAGES.—Messrs. Lowe and Simpson, of Manchester, have adopted some improvements in the construction of railway carriages, which they have patented, causing the momentum of a train to apply friction to the wheels, or axles, of the carriages, when the speed is slackened, in order to retard, or stop, them. The machinery allows the friction to be removed the moment the engine starts again, whereby a great saving is effected in the wear and tear of the carriages; and the frequent occurrence of accidents, resulting from neglect and injudicious use of the common breaks, in a great measure prevented—the patent machinery being self-acting. It cannot well be described without a diagram.

NEW BOILER WATER GAUGE.—Mr. Newton, the patent agent, of Chancery-lane, has taken out a patent for a water gauge for steam-boilers (being a communication). A small cylinder is bolted to the boiler, connected with the interior by two short tubes, or passages—one with the steam space, the other with the water. A small metallic, or other, piston, moves freely in this cylinder, connected by a rod with a vibrating arm, or lever, above, inclosed in a quadrant-shaped chamber, fixed on the top of the small cylinder. The arm of the lever passes through a stuffing-box at the small end of the quadrant, and carries another arm, or lever, furnished with a pointer, indicating, on a graduated scale, the height of water in the cylinder, and, consequently, in the boiler. A handle is affixed to the lever, to enable the attendant to raise the piston, and bring it down with percussive force on to the surface of the water, in order to ascertain its height—the same pressure of steam and water existing in the cylinder and quadrant case as in the boiler. One or two small apertures should be made in the piston, to allow the water and steam to pass through when it is raised

RAILWAY CAPITAL ACCOUNTS.

The near approach of the half-yearly dividend meetings, leads us to remind railway shareholders of the great importance of requiring from their directors such a statement of their present and ultimate expenditure, as will enable the public to form something like a reasonable judgment of their prospective net returns, when all the lines in progress shall be completed. It is obvious, that much of the prevailing distrust of railway property arises from the uncertainty now universally felt, as to the extent to which the numerous amalgamations and extensions, resolved upon by directors, will increase or lessen future dividends. This uncertainty ought at once to be cleared up; and, whether cleared up satisfactorily or not, every company will suffer in public estimation until it be done.

The following is a brief analysis of the probable ultimate cost of a few of the principal trunk lines, with their branches and extensions, as far as that cost can at present be gathered, from the Quarterly Sheet of Railway Intelligence (No. 2), published under the superintendence of the committee of the Stock Exchange. The return shows the total capital authorised to be raised in shares and loans, and total mileage when completed:—

Companies.	Capital.	Mileage.
London and North-Western Comp., with branches and extension	£39,321,643	705
Caledonian, with branches and extension (including the Dundee, Perth, and Aberdeen Junction)	10,605,733	402
Midland, with branches and extensions	21,913,490	396
Great Western, with branches and extensions	25,498,325	854
London, Brighton, and South Coast	7,422,290	182

Assuming that the whole of the capital authorised to be raised by these companies, will be ultimately expended in land, rails, buildings, and working stock (which is, perhaps, a little beyond the contemplated outlay), the following will be the proportionate cost of each:—

Companies.	Cost per mile.
London and North-Western	£56,000
Caledonian	26,000
Midland	55,000
Great Western	29,500
London, Brighton, and South Coast	40,500

The above is given as an approximate only to the true result. It rests with railway shareholders to obtain a strictly accurate return.

PROSPECTS FOR INVESTMENT OF CAPITAL.

Notwithstanding the numerous monetary panics with which this country has been visited at varying intervals, none has ever been more severely felt by individuals, or caused more general distress and mistrust, than the one from which, it is sincerely hoped, we are now about escaping. We think we cannot give our readers a better idea of the brighter prospects now in view, than by the following remarks of Mr. Allsop, the share-broker, with which we have been favoured:—

At the present time money is somewhat easier, and the bullion in the Bank has rapidly and materially augmented; circumstances which, taken in conjunction with the salutary lesson of prudence, enforced by the late panic, seem to warrant the conclusion that, should matters pertaining to the state of Europe generally, offer no check, the domestic affairs of the country are progressing towards a more satisfactory condition. Under these circumstances, the attention of capitalists is again directed towards the leading railways, and chiefly to the preference or guaranteed shares—it being probable that, until the closing of the capital accounts, and adoption of some simple and uniform system of accounts, doubts and uncertainties regarding the solvency of some of the lines, hitherto of the first character, will still prevail. To these guaranteed or preference shares, and more especially to those which offer prospective advantages in the shape of further dividends, or the option of taking shares in the parent company, we accord the first place. The undertakings of this character in which we place the highest confidence are the—

Birmingham and Oxford: guaranteed 5 per cent.—with bonus of 10*l.* 5*s.*, six months after opening any portion of the line.
Boston, Stamford, and Birmingham: guaranteed 6 per cent.—with option any time within four years of taking Great Northern shares at par.
Brighton preferential: guaranteed 5 per cent.—with option, for one year, to exchange for Brighton stock at par.
Chester and Holyhead: guaranteed 5½ per cent.—with division of surplus profits.
Chester and Shrewsbury: guaranteed 8 per cent.—with right to new issues.
East Anglian, New: guaranteed 6 per cent.—with option, for five years, to convert into old shares.
East Lincolnshire: guaranteed 6 per cent.—with option, for three years, of conversion into Great Northern shares at par.
East Indian: guaranteed 5 per cent.—guaranteed by the East India Company with all surplus profits.
Leeds and Thirsk preference: guaranteed 6 per cent.—with surplus from the opening of the lines.
Oxford, Worcester, & Wolverhampton: guaranteed 4 per cent. by the Great Western Co.
Reading and Reigate: guaranteed 5½ per cent. by the Dover Company.
Royston and Hitchin: guaranteed 6 per cent. by the Great Northern; and
Wilts, Somerset, and Weymouth: guaranteed 4 per cent., and right to new issues.

Many of the above lines, being at a considerable discount, offer unquestionable advantages to purchasers; and the income being fixed, and free equally from unnatural depression, as from artificial and fictitious elevation, possess peculiar attraction after a period of such violent agitation. The London and North Western, paying at present price about 6 per cent., will, as the main trunk line of the kingdom, probably be among the first to feel the effect of any relaxation in the stringency of the money market, as likewise the Brighton, Scottish Central, East Lancashire, and North British.

Of the unfinished lines, the most depreciated appear to be the East Anglian; the Ambergate; Leeds and Thirsk; Exeter, Yeovil, and Dorchester; London, Salisbury, and Yeovil; Leeds and Dewsbury; and Huddersfield and Manchester. The Malton and Driffield, the only independent line in Mr. Hudson's territory, and which *must* eventually be absorbed by one of the larger lines, is well worth attention at the present large discount. The Sambre and Meuse, West Flanders, and the Overyssel, have each severely felt the crisis through which we have passed, and the rapid succession of calls has forced the two former to an almost nominal price. The Overyssel will not be prosecuted under the present unfavourable circumstances; efforts are, therefore, being made to obtain a return of the deposit, which will probably be ultimately successful. Investments made into any of the above lines, after due caution and inquiry we consider likely, at present rates, to be advantageous.

Foreign stocks, at this moment, are not much in request, and with the exception of Spanish, in which there is some speculation, are almost neglected. The present low price of Mexican, however, challenges a word of remark—as, in the event of an arrangement of the present dispute with the United States, or even its conquest and annexation by its invaders, a material improvement would result, whilst the price precludes the chance of any large fall.

To capitalists whose purchases are made with an even mind, and as the result of deliberate and sufficient inquiry, the stock of the Republic of Ecuador (with which treaties have recently been signed by the Great Powers) offers a great temptation at the present very low price.

The shares of the New British Iron Company (the property and plant of which were purchased under unusually favourable circumstances) are now at par, at which price they pay about 15 per cent., and seem also an excellent investment.

Of the progress of the Australian Mining Company, it is probable that we shall shortly have further and more ample details, of the favourable nature of which the best informed are very sanguine.

The New Docks, at Southampton, form one of the most promising undertakings in the country; and the stock of this company being greatly depreciated by the struggles and difficulties incident to the earlier stages of its progress, is deserving the attention of the investor.

Consols are now at the highest price of the last six months, and appear open to further considerable variation.

INLAND NAVIGATION FOR 1850; OR, CANAL PROPERTY PRESERVED.—Such is the title of a publication in form of a pamphlet, intended to be published monthly, for the purpose, as its title implies, of calling public attention to the present depreciated state of canal property, and to offer the means for its restoration to a profitable state. Mr. T. Gray, the author, is the son of Thos. Gray, the father of railways, who also took out a patent for a screw-propeller, which the son is now endeavouring to bring out, by its application to the propulsion of boats on canals—his ultimate object and aim being, in good earnest, to carry out his project, by the formation of a company, or league, for the purpose. In the present number, the nature of his intentions appear clearly to be, to show the public that railways, turnpike roads, rivers, and canals, are well calculated to feed each other; and that by his system of trains of light boats, propelled by aquatic locomotive engines, an enormous saving would be effected in the carriage of passengers and goods, in those places where canals are now situated, by which numerous towns and villages, of large population, will be reached, and by which his boats would become feeders to the railways, and the latter perform the same good office to his boats, and mutual benefit ensue. The number under notice is written in an amusing, colloquial style, as imaginary conversations, in which is shown how, in every instance of the most successful inventions, the inventors themselves were laughed at—in many cases made out as harmless madmen, and, in all, thought idle schemers. He has now been nine years maturing his plans, which, however, are not yet described; and he calculates that, by the formation of a company, he shall be able to complete his arrangements, and be in profitable working, by the year 1850. The means of propulsion to be applied will be as before stated—a peculiar screw-propeller; and, should a description appear in the next monthly number, we shall lay it before our readers.

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.
THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 41
BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton the 20th; and from Suez on or about the 10th of every month.
For rates of passage-money, plans of the steamers, and to secure passages, apply at the company's offices, 31, St. Mary Axe, London.

IMPORTANT TO RAILWAY AND STEAM NAVIGATION COMPANIES, MANUFACTURERS, AND ENGINEERS.
W. BROTHERTON AND CO.'S
PATENT LUBRICATING FLUID (or Animal Oil) FOR ALL DESCRIPTIONS OF MACHINERY. 42
W. B. & CO. have the pleasure to state, that the above article is extensively used in her Majesty's Steam Navy, and by several of the principal Steam Navigation and Railway Companies, and is pronounced by them, and by the first practical engineers of the day, to be far better adapted for the purposes of lubrication than any other article hitherto used for such purposes. The Patent Lubricating Fluid is equally applicable for the most intricate and fine pieces of machinery, as for the heaviest bearings of the steam-engine. It is cheaper, much more economical, and cleaner than oils at present in use; is free from smell, and calculated to effect a vast saving in the expenditure of working steam powers.
Further particulars can be had, and testimonials seen, by application to the manufacturers, W. BROTHERTON & CO., Hungerford Wharf, Strand, London.
N.B.—The above article will burn in lamps, and give a light equal to the best sperm oil.

FLEXIBLE HOSE-PIPES FOR LOCOMOTIVE ENGINES, RAILWAY CRANES, FIRE-ENGINES, GAS, &c.
PATENT VULCANISED INDIA-RUBBER HOSE-PIPES AND TUBING OF EVERY DESCRIPTION. 43
These pipes are made to stand hot-water without injury—are very superior to leather pipes, or the common India-rubber pipes; and, as they do not become hard or stiff in the lowest temperatures, or require any application when out of use, are particularly well adapted for fire-engines.
FLEXIBLE TUBING, of every description, for gas, chemical purposes, &c.
VULCANISED INDIA-RUBBER WASHERS, all sizes, for steam and hot-water joints, &c.—Sole manufacturer, JAMES LYNE HANCOCK,
Goswell Mews, Goswell-road, London.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £8 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each. 44
DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery.
Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

THE PATENT OFFICE AND DESIGNS REGISTRY, *No. 210, STRAND, LONDON.*
INVENTORS will receive (gratis), on application, the OFFICIAL CIRCULAR OF INFORMATION, detailing the eligible course for PROTECTION of INVENTIONS and DESIGNS, with Reduced Scale of Fees. 45
Messrs. F. W. CAMPIN and CO. offer their services, and the benefit of many years' experience, in SECURING PATENTS and REGISTRATIONS OF DESIGNS, with due regard to VALIDITY, economy, and dispatch—assisted by scientific men of repute.
Also, in MECHANICAL and ENGINEERING DRAWINGS, whether connected with Patents, Railways, or otherwise, by a staff of first-rate draftsmen.
Application personally, or by letter, to F. W. Campin and Co., No. 210, Strand (corner of Essex-street).

TWENTY-FIRST REPORT OF THE LONDON JOINT-STOCK BANK.—At a General Meeting of the shareholders, held at the banking-house of the company, in Princes-street, Mansion-house, on Thursday, January 13, 1848

GEORGE HOLGATE FOSTER, Esq., Chairman.
Sir RICHARD JENKINS, G.C.B., Deputy-Chairman.

DIRECTORS. 46

Sir Felix Booth, Bart.	William James Lancaster, Esq.
Sir George Carroll, Alderman.	John Christopher Lochner, Esq.
William Miller Christy, Esq.	Sir John M'Taggart, Bart., M.P.
William Curling, Esq.	George Meek, Esq.
George Holgate Foster, Esq.	William Mitcalfe, Esq.
William Ormsby Gore, Esq., M.P.	Ambrose Moore, Esq.
Henry Grace, Esq.	John Timothy Oxley, Esq.
Archibald Hastie, Esq., M.P.	George Scholefield, Esq.
Sir Richard Jenkins, G.C.B.	William Shadbolt, Esq.

George Tayler, Esq.
THE MANAGER—George Pollard, Esq.
SOLICITORS—Messrs. Tilson, Squance, Clarke, and Morice.

The following report was presented:—
It will be seen, from the accompanying statement of the affairs of the bank, that during the six months ending the 31st ultimo., a net profit of £23,847 14s. 9d. has been realised, which, with the undivided profits, amounting to £16,663 1s. 6d., brought forward from the preceding half-year, makes a total of £40,510 16s. 3d., and enables the directors to declare the usual dividend, after the rate of £6 per centum per annum; and also a bonus of 7s. 6d. per share, both free from income-tax, leaving a small balance of £10 16s. 3d., which has been carried to the credit of the guarantee fund, together with interest thereon, in conformity with the provisions of the Deed of Settlement, whereby that fund is augmented to £123,759 1s. 7d.
The shareholders cannot but be aware that the period embraced by these accounts was one of extraordinary difficulty and derangement in the commercial and monetary affairs of the country, and the numerous failures which have occurred in almost every branch of trade will have prepared them for the unusual amount of the item in the statement of profit and loss, which comprises the losses by bad debts; indeed, the directors feel confident that, viewed with reference to the severity of the late crisis, their participation in the disasters of the past six months will be regarded as less than could have been anticipated, and the result of their operations as a subject of congratulation.
The directors have, however, to inform the shareholders that the above-mentioned item also includes a loss of £6000, which they regret to say the bank has sustained by the defalcation of one of their clerks, on the establishment of the western branch.
By the established rotation, the directors who now retire are Sir George Carroll, Ald., William James Lancaster, Esq., John Christopher Lochner, Esq., Sir John M'Taggart, Bart., M.P., and George Scholefield, Esq., who offer themselves for re-election; and William Blount, Esq., a duly qualified shareholder, has also given notice that he is a candidate for a seat in the direction.
The dividend and bonus will be payable on and after the 21st inst.
The preceding report having been read to the meeting by the secretary, a dividend for the half-year ending the 31st December last, after the rate of £6 per centum per annum, and a further division of 7s. 6d. per share out of the net profit of the year ending as above, was declared by the chairman.
Resolved unanimously,—That the report now read be received, and that it be printed for the use of the shareholders.
William Blount, Esq., withdrew as a candidate on the present occasion, and the following directors were unanimously re-elected—viz.: Sir George Carroll, Ald., William James Lancaster, Esq., John Christopher Lochner, Esq., Sir John M'Taggart, Esq., M.P., and George Scholefield, Esq.
Resolved unanimously,—That the best thanks of this meeting are due, and are hereby given, to the chairman and directors for the able and successful manner in which they have conducted the affairs of the bank.
Resolved unanimously,—That the best thanks of this meeting be given to George Pollard, Esq., for the ability and zeal evinced by him in the management of the bank.
(Signed) GEORGE HOLGATE FOSTER, Chairmam.
Resolved unanimously,—That the best thanks of this meeting be given to the chairman for the business-like manner in which he has conducted the proceedings of the day.
(Signed) RICHARD JENKINS, Deputy-Chairman.
Extracted from the minutes. (Signed) F. HEWETT, Secretary.

CLERICAL, MEDICAL, AND GENERAL LIFE ASSURANCE SOCIETY.
Persons of all ages, and in every station, may assure with this society on very moderate terms. No extra premium is required for sea-risk, or residence in any part of Europe. Persons wishing to visit, or reside in, other parts of the world, may also effect policies at a small increase of premium. BONUSES. 47
The two first divisions averaged £22 per cent. on the premiums paid; the third, 28½ per cent. The FOURTH bonus, declared January, 1847, averaged rather more than £36 per cent.; and from the large amount of profit reserved for future appropriation and other causes, the bonuses hereafter are expected to exceed that amount.
Tables of rates, with the last full report, can be obtained of the society's agents, or by addressing a letter to GEO. H. PINCKARD, Resident Secretary.
No. 99, Great Russell-street, Bloomsbury, London.

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY, 26, *CORNHILL, LONDON.*
Capital £500,000.—Empowered by Act of Parliament.
This institution embraces important and substantial advantages with respect to Life Assurances and Deferred Annuities. The assured has, on all occasions, the power to borrow, without expense or forfeiture of the policy, two-thirds of the premiums paid (see table); also the option of selecting benefits, and the conversion of his interests to meet other conveniences or necessity.
Assurances for terms of years are granted on the lowest possible rates. 48
DIVISION OF PROFITS.
The remarkable success and increasing prosperity of the society has enabled the directors, at the last annual investigation, to declare a fourth bonus, varying from 35 to 85 per cent. on the premiums paid on each policy effected on the profit scale.
EXAMPLES.

Age.	Sum.	Prem.	Year.	Bonus added.	Bonus in Cash.	Permanent reduction of Premium.	Assured may Borrow.
60	£1000	£0 3 4	1837	£217 15 1	£109 0 11	£16 0 4	£445 0 0
			1838	192 3 0	87 1 4	13 10 2	395 11 1
			1839	165 11 10	74 1 9	11 3 1	346 2 3
			1840	116 7 6	54 0 10	7 12 10	296 13 4
			1841	111 6 8	49 10 0	7 10 4	247 4 5

The division of profits is annual, and the next will be made in December of the present year. F. FERGUSON CAMBOUX, Secretary.

TO THE CONSUMERS OF STEAM-BOILER TUBES.

THE QUEEN *v.* CUTLER AND OTHERS.
IN SCIRE FACIAS.

The public mind having been misled as to the real termination of the trial of the above writ, by the verdict of the jury; and some erroneous notions also existing as to the real state of circumstances between the parties connected with that action, we think a perusal of the following public correspondence, which has appeared in the Birmingham newspapers, will have the effect of correcting any such notions.

We are, Gentlemen,
THE PATENT WELDED IRON TUBE COMPANY.
42, Cambridge-street, Birmingham, Jan. 3, 1848. 49

COURT OF QUEEN'S BENCH.
REGINA *v.* CUTLER AND OTHERS.
WELDED IRON TUBES FOR STEAM BOILERS.

MR. JOB CUTLER having issued a circular (without my knowledge), dated Dec. 15, 1847, in which he states that "*he is making arrangements with manufacturers in England to make tubes under his patent.*"

I hereby give notice, that in the year 1842, I purchased an interest in the said patent; that it has been assigned by Mr. Cutler to Mr. Thomas Slaney, solicitor, as my trustee; and that Mr. Cutler has no right to grant licenses; nor has he or any other person power to deal with the patent in any way whatever without my authority.
(Signed) EDWARD BOWER.

IN THE QUEEN'S BENCH.
CUTLER AND OTHERS *als.* THE QUEEN.
PATENT WELDED IRON TUBULAR FLUES FOR STEAM-BOILERS.

My attention having been drawn to an advertisement of Mr. E. Bower, inserted in the *Birmingham Advertiser* newspaper, I would offer a few remarks thereon. It is true that Mr. Bower, in 1842, purchased a share of my patent, and that it was assigned to Mr. Thomas Slaney, as *our mutual* trustee; and it is further true, that the payment of the purchase money was made in long-dated bills, and payments extending to the 25th of March, 1847—the last two payments of which, with interest thereon, are not yet made; but Mr. Bower has resisted my claim thereto, and has actually pleaded, in an action which is now pending against him to recover the purchase money, that he did not make the deed of 1842.

It certainly would appear, that Mr. Bower has a peculiar facility for recollecting such things as suit his own purpose, and he can easily carry memory back as far as 1842; but when matters of a more recent date, and which tend to show that Mr. Edward Bower has no more interest in my patent than has the greatest stranger to me in the world, he suddenly becomes oblivious; but, with his permission, I will enlighten him on the subject.

In 1846, he refused to pay me the royalty which was due under an exclusive license granted by me to him in July, 1842; and I was accordingly compelled to bring an action against him for recovery thereof, and which came on for trial at the Warwick Summer Assizes of 1846; but, in consideration of my consenting to withdraw a juror, and abandon my claim for the said royalty, and all future royalty, the said Edward Bower agreed to reassign to me my patent, and to vacate the said license; or, in the language of his own counsel, Sir F. Kelly, "the effect of which" (speaking of the arrangement then made) "will be to *leave the plaintiff in full possession of all the advantages of the very valuable and important patent, for such it is, which he has obtained.*"

And, although Mr. Edward Bower has since repudiated his agreement, proceedings in equity are now pending which will have the effect of showing fully to whom the patent belongs; but, as I am fully advised by counsel that I am, by virtue of the said agreement, solely entitled to the said patent, and consequently solely entitled to grant licenses, it may yet be proved that Mr. Bower and his partner (for I have never seen any notice of dissolution) are using my patent, or some portion thereof, without sufficient authority. However, I now feel called upon to GIVE NOTICE that I shall cause proceedings to be commenced against all parties making, using, *applying*, or vending, patent welded iron tubular flues for steam-boilers, unless made by me or my *licensees*.
Sparbrook, Birmingham, December 31, 1847. JOB CUTLER.

COURT OF QUEEN'S BENCH.
REGINA *v.* CUTLER AND OTHERS.
WELDED IRON TUBES FOR STEAM BOILERS.

My attention having been directed to a notice by Mr. Edward Bower, which appears in the *Herald* and *Advertiser* newspapers of Thursday last, I feel called upon to state that the patent, the subject of these proceedings, was assigned to me in 1842, as a trustee mutually appointed by Messrs. Bower and Cutler: and that I consider Mr. Bower has now no interest whatever in the said patent, but that the same wholly belongs to Mr. Cutler, and that he is at liberty, equitably, to deal with the same in any way that he may think proper.
New-street, Jan. 1, 1848. THOMAS SLANEY.

QUEEN'S BENCH.
REGINA *v.* CUTLER AND OTHERS.

In reply to an advertisement which appeared in the *Birmingham Journal* of the 1st inst., signed "Job Cutler," in which he admits the truth of the facts to which I called public attention by an advertisement in the *Birmingham Herald* and *Birmingham Advertiser* of the 30th ult., I deem it merely necessary (for guarding the public and persons who might be induced to enter into treaty with Mr. Cutler for licenses to use his alleged invention) to inform them, that in the action stated by him to have been brought against me in 1846, I was merely a *nominal* defendant, and had no interest whatever in the cause of action, except that, had it succeeded, a part of the sum recovered would have belonged to me; that that action was settled by an agreement in writing, prepared by the counsel of the parties really interested, which Mr. Cutler has since sought to disturb by a motion made in the Queen's Bench, and that his motion has been discharged, with costs amounting to 69*l.* 18*s.* With respect to the proceedings in Equity, to which Mr. Cutler has referred with such studied deceptiveness, the public is informed that those proceedings consist of a Bill in Chancery filed by myself against Mr. Cutler and Mr. Slaney (the trustee), to compel an assignment to me of the patent, pursuant to the trusts of the deed of 1842.

It surely cannot be necessary for Mr. Cutler to be informed why, in special pleading, the existence and execution of a deed (however indisputable its existence may be) is denied!—If it be, he can refer to an authority on that subject in his own family. Sufficient for me is it that I am (as Mr. Cutler says) advised by counsel so to plead.

With respect to his reference to the purchase money for a moiety of his patent being paid in long-dated bills, it is only necessary to say, that those bills were given in accordance with the bargain for the purchase, *and for Mr. Cutler's purposes.*

With respect to the settlement made at Warwick (by other parties), in an action in which I was *nominally* defendant, and was not even in Court, the best answer is the agreement itself, set ont hereunder, and by which the public will perceive the value of Mr. Cutler's assertion—that "Mr. Bower agreed to reassign" the patent, and vacate the said license.

[COPY.]

"Plaintiff undertaking not to call on defendant for payment of any costs; the *scire facias* brought as to the patent to be discontinued, and *nolle prosequi* entered. The license and assignment thereof to be hereby vacated; the defendant and his assigns hereby agreeing to execute any deed vacating and reassigning the same to the plaintiff or his assigns, if called upon so to do. No action to be brought by either plaintiff or defendant, or his assigns, for or in respect of any thing done under the license or assignments; and the defendant and his assigns to be freed from all claims of plaintiff to royalty under the license and assignments.

"This arrangement to be without prejudice to any right, or alleged right, of plaintiff to recover any part of the purchase-money under the deed of license or assignments."

The public is also informed, that the Birmingham Patent Iron Tube Company, the parties really interested in the action before referred to, have recently issued a printed circular, which explains the real situation in which Mr. Cutler's alleged invention is now placed—a copy of which is also set out hereunder. EDWARD BOWER.
Birmingham, Jan. 1, 1848.

[COPY.]

"Birmingham Patent Iron Tube Company,
"42, Cambridge-street, Birmingham.

"GENTLEMEN,—With reference to a circular dated Birmingham, December 15, 1847, signed '*Job Cutler*,' in which it is, amongst other things, erroneously stated '*that no persons, other than those named in the circular, are authorised to make or vend Lap-jointed Welded Iron Tubes, and that the using of any other than those made by those persons will be a clear infringement of his patent*,' we beg leave to inform you, that we continue to make Lap-jointed Welded Iron Tubes, as we always have done, by virtue of a license granted by Mr. Richard Prosser, under his patent of 27th March, 1840, prior to the date of Mr. Cutler's patent.

"Thanking you for past favours, and soliciting a continuance of them, we hereby guarantee you against the legal consequences of using such tubes made by us.

"We respectfully request you will suspend the formation of any opinion on the subject of the verdict returned by the jury on the trial of 'The Queen *v.* Cutler,' that verdict having been returned in direct opposition to the express ruling of Lord Denman, '*that on all the issues relating* to the objections to the patent in respect to the 3d and 4th claims of the specification, the patent was void at law, and on those issues they must find a verdict for the Crown.'

"Those issues relate to the invalidity of Mr. Cutler's patent for claiming, as invention, *the mere application* of well-known articles of manufacture to a new purpose; and we have every reason to believe, notwithstanding such verdict, that judgment will be entered up for the Crown, and that Mr. Cutler's patent, under which, we believe, tubes have not yet, nor ever can, be made, will be cancelled."

PATENT GALVANISED IRON AND WIRE ROPE WORKS, *MILLWALL, POPLAR.*
ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.

BEWARE OF IMITATIONS OF DR. LOCOCK'S PULMONIC WAFERS.—Unprincipled persons, chemists, and others, prepare counterfeits of this popular remedy. Purchasers are, therefore, cautioned not to purchase any Wafers unless the words "Dr. Locock's WAFERS" appear in white letters on a red ground in the Government stamp, outside each box—without which all are counterfeits and an imposition.—Dr. Locock's Wafers give instant relief, and a rapid cure of asthma, coughs, and all disorders of the breath and lungs. To singers and public speakers they are invaluable, for clearing and strengthening the voice. They have a most pleasant taste.—Price 1s. 1½d., 2s. 9d., and 11s. per box. Agent: Da Silva and Co., 1, Bride-lane, Fleet-street, London. Sold by all medicine vendors. 50

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*** It will at all times save much delay and inconvenience, if communications are directed simply To THE EDITOR, *Mining Journal Office*, 26, FLEET-STREET, LONDON.

And POST-OFFICE ORDERS, &c., must be made payable to WILLIAM SALMON MANSELL as acting for the proprietors.